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Alys Yijun Zhao
zhao6620@mylaurier.ca

Christian H. Jordan
Wilfrid Laurier University, cjordan@wlu.ca

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Helping Those Who Are Like Me:
Highlighting Similarities to Elicit Empathy in Narcissists

by

Alys Yijun Zhao

Bachelor of Arts in Psychology, University of Waterloo, 2016

Master's Thesis

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Abstract

Previous research suggests that narcissists (compared to less narcissistic individuals) lack empathy toward others unless specifically instructed to take others' perspectives. But are narcissists capable of spontaneously empathizing with others without the need for instructed perspective-taking? Three studies addressed this question. Study 1 (Study 1a; $N = 232$ & Study 1b; $N = 488$) examined whether manipulating a target person's level of narcissism (i.e., non-narcissistic, moderately-narcissistic, or highly-narcissistic) encouraged more empathy toward more narcissistic targets, who described a difficult romantic breakup, from more narcissistic participants. Study 2 ($N = 590$) used the same procedure and further examined whether target narcissism affects attributions that the target is responsible for the breakup and perceptions that they deserve negative outcomes. Study 3 ($N = 648$) examined whether effects on empathy and other outcomes depend on how antagonistic the target is, by manipulating target narcissistic antagonism (i.e., non-narcissistic, non-antagonistically-narcissistic, or antagonistically-narcissistic targets) using the same procedure. Results reveal that narcissistic participants perceived more similarity to the highly-narcissistic, non-antagonistically-narcissistic, and antagonistically-narcissistic targets than did less narcissistic participants. Results for empathy were somewhat inconsistent, although they overall suggest that narcissistic individuals empathize just as much as less narcissistic individuals with narcissistic targets. These findings suggest that narcissists do not lack empathy toward all others compared to less narcissistic individuals, and that narcissists can empathize without instructed perspective-taking.

Keywords: *narcissism, empathy, perceived similarity*

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Helping Those Who Are Like Me:

Highlighting Similarities to Elicit Empathy in Narcissists

The study of narcissism as a personality dimension is a fairly new area that has been steadily gaining popularity. As a personality trait that is also a part of the “Dark Tetrad” (i.e., the personality traits of narcissism, Machiavellianism, psychopathy, and sadism) of interpersonally “toxic” personality dimensions (Buckels, Jones, & Paulus, 2013), researchers often seek to analyze its qualities and the reasons behind the behaviors of people who possess this trait. Indeed, narcissists excel at drawing attention to themselves, to the extent that even the field of psychological science seems compelled to study them.

Narcissism can be conceptualized as a personality dimension that varies normally in the general population (in contrast to Narcissistic Personality Disorder or other clinical manifestations of narcissism), and it is this conceptualization that this paper will focus on. It is usually measured on a continuous scale ranging from low to high narcissism. This construct can manifest in two distinct forms: grandiose and vulnerable narcissism (Wink, 1991). Although both facets share features such as: being conceited, arrogant, entitled, and having a tendency to interact with others in an antagonistic manner (Dickinson and Pincus, 2003; Miller & Campbell, 2008; Miller et al., 2011; Wink, 1991), each form also has its own distinct characteristics. Grandiose narcissism is characterized by high self-esteem, grandiose self-views, self-enhancement, and bold extraversion (Cain, Pincus, & Ansell, 2008; Miller, Lynam, Hyatt, & Campbell, 2017; Wink 1991; Zajenkowski, Maciantowicz, Szymaniak, & Urban, 2018). It is also associated with exploitative and aggressive behaviors (Pincus et al., 2009). Vulnerable narcissism, in contrast, is characterized by insecurity, defensiveness, sensitivity to criticism, and contingent self-esteem (Cain et al., 2008; Miller et al., 2011; Wink 1991).

Research posits that the reason narcissists tend to display more antisocial behaviors such as aggression (Konrath & Bushman, 2006), compared to less narcissistic people, is because they lack empathy for others (Hepper, Hart, Meek, Cisek, & Sedikides, 2014). Empathy relies on recognizing and experiencing what another person is feeling (Reniers, Corcoran, Drake, Shryane, & Völlm, 2011), and is an important contributor to social functioning, prosocial behavior, and interpersonal harmony (Miller & Eisenber, 1988; Vreeke & van der Mark, 2003). Given that narcissism is widespread and may be increasing among younger generations (Twenge, Konrath, Foster, Campbell, & Bushman, 2008), it is crucial to investigate ways of potentially reducing antisocial behavior in narcissists. Hence, the goal of the following three studies is to explore whether similarity can elicit empathy from narcissists spontaneously without the need for instructed perspective taking.

Empathy

Empathy is understanding and sharing another person's experience and emotional state from their perspective or, metaphorically, "standing in someone else's shoes" (Hodges & Myers, 2007; Kang & Lakshmanan, 2018; Pajevic, Vukosavljevic-Gvozden, Stevanovic, & Neumann, 2018). Empathy is divided into two types: cognitive and affective empathy. Cognitive empathy is the ability to consciously recognize and process others' emotional states and to take others' perspectives, while affective empathy is the process of sharing others' emotions (Chrysikou & Thompson, 2015; Cox et al., 2012). Hence, empathy is comprised of a conscious recognition and understanding of others' emotions and the ability to respond with an appropriate emotion. However, findings suggest that while narcissists do not demonstrate complete defects in cognitive empathy (Wai & Tiliopoulos, 2012), they possess impairments in affective empathy (i.e., Hepper, Hart, & Sedikides, 2014).

Narcissists' impairments in affective empathy thus result in less empathetic responses than less narcissistic people when they witness others' emotional suffering (e.g., Hepper, Hart, Meek, Cisek, & Sedikides, 2014). But not only do narcissists feel less empathy toward others, they also display less pronounced physiological responses associated with empathy (Hepper, Hart, & Sedikides, 2014). Hepper, Hart, and Sedikides (2014) explored grandiose narcissists' autonomic arousal in response to other's emotional suffering by measuring heartrate. The study found that instead of showing an increase in heartrate in response to others' emotions or suffering (Anastassiou-Hadjicharalambos & Warden, 2007, 2008; Zahn-Waxler et al., 1995), high narcissism individuals showed less of an autonomic response than low narcissism individuals (Hepper, Hart, & Sedikides, 2014). These findings suggest that narcissists are not emotionally and physiologically affected by another's emotional distress. However, narcissists are still able to recognize emotional distress in other.

Wai and Tiliopoulos (2012) assessed cognitive and affective empathy in grandiose narcissists using a facial response task. Participants were presented with individual images of facial expressions (consisting of neutral, happy, sad, angry, and fearful faces) and asked to identify the emotion each image depicted (which measured cognitive empathy) and indicate how they felt toward each image (which measured affective empathy). Participants who scored high on narcissism were able to correctly identify the emotion depicted in each image, but responded inappropriately to the facial expressions (i.e., expressing positive affect towards sad facial images). Hence, high narcissism individuals are able to use cognitive empathy to read and assess others' emotions but are deficient in the aspect of affective empathy that allows for the appropriate response to others' emotions.

Although narcissists are able to use cognitive empathy to correctly identify others' emotions, one area of cognitive empathy narcissists struggle with is taking the perspective of

others (Böckler, Sharifi, Kanske, Dziobek, & Singer, 2017; Vonk, Zeigler-Hill, Mayhew, & Mercer, 2013), Research suggests that individuals high in narcissism compared to those low in narcissism, may have a harder time with perspective taking because they tend to have a highly self-focused perspective (Jones & Brunell, 2014). However, perspective taking is suggested to be a prerequisite of affective empathy and to mediate the relation between narcissism and (low) generosity (Böckler et al., 2017; Vreeke & van der Mark, 2003). This may be because imagining oneself as the target of empathy better shapes one's understanding of the target's situation (Kang & Lakshmanan, 2018), and this could help narcissists become less self-focused. Although narcissists do not automatically feel empathy for others' emotional suffering, when high narcissism individuals are instructed to take another person's perspective, they are able to feel empathy toward that person, display physiological responses associated with empathy, and are more likely to engage in prosocial behaviors (Hepper, Hart, & Sedikides, 2014; Kang & Lakshmanan, 2018). These findings suggest that engaging in perspective-taking changes the way narcissists process other's emotional distress, and that narcissists' general lack of empathy may reflect a lack of motivation to empathize rather than an inability to experience empathy. But the extent to which narcissists are able to take others' perspectives, even when instructed directly to do so, may depend on their degree of similarity to those others.

Similarity

Unsurprisingly, people tend to like others who are similar to themselves (Byrne, 1997; Park & Schaller, 2005). Similarity is associated with increased attraction (Byrne, 1969), and people are more likely to have romantic partners of similar physical attractiveness as themselves (Little, Burt, & Perrett, 2006). People even prefer strangers who are attitudinally similar to themselves than strangers with dissimilar attitudes (Byrne, 1961), and judge others with similar beliefs (on six topics, such as abortion and capital punishment) as themselves to be more moral

in character and trustworthy than others with dissimilar beliefs (Bocian, Baryla, Kulesza, Schnall, & Wojciszke, 2018). People also choose to be physically closer (i.e., sit closer) to others who look similar (e.g., wearing glasses) to themselves than others who look dissimilar (Mackinnon, Jordan, & Wilson, 2011). Moreover, emotional similarity (i.e., anger) between ingroup and outgroup members in response to an anger-eliciting news story has even been shown to increase one's willingness to support outgroups (McDonald et al., 2017).

A few mediators have been suggested to explain the association between similarity and liking. Consensual validation suggests that others who are attitudinally similar offer validation to the way individuals interpret the world (Montoya & Horton, 2004). Since there are often no objectively correct criteria for many beliefs, people compare their beliefs with others as a form of validating the correctness of their own beliefs (Festinger, 1957). Hence, consensual validation of beliefs with others who hold similar beliefs leads to positive affect and liking for those others (Byrne & Clore, 1970). Another possibility is that perceived similarities with another person lead to the inference that the other person possesses additional positive attributes, which leads to greater liking (Hampton, Fisher Boyd, & Sprecher, 2019). Additionally, people assume that similar others will like them more than dissimilar others (Greitemeyer, 2010), and that they expect to, and do, enjoy interactions more when they are with similar others (Burleson, Kunkel, & Birch, 1994; Hampton, Boyd, & Sprecher, 2019), both of which lead to greater liking for similar others than dissimilar others.

Narcissists may be a prime example of the similarity-liking principle. For narcissists, perceiving similarities with others may remind them of themselves, resulting in more positive feelings toward more similar others. Previous research has demonstrated that narcissists are less aggressive toward others if a similarity between them is highlighted (Konrath, Bushman, & Campbell, 2006), suggesting a possible link to the similarity-liking principle. Konrath et al.

(2006) demonstrated that when grandiose narcissists receive negative, ego-threatening feedback on an essay from an evaluator, they are more likely to respond with aggression toward the evaluator (i.e., choosing to blast the evaluator with a loud noise) compared to low narcissism participants. However, if high narcissism participants were told beforehand that they shared a birthday or fingerprint pattern with the evaluator, high narcissism participants did not respond to negative feedback with more aggression toward the evaluator compared to low narcissism participants.

Additionally, narcissists are more accepting of their own narcissistic traits than are less narcissistic people (Carlson, 2013), and the narcissistic-tolerance theory suggests that narcissists like more and are more tolerant of other narcissists than are less narcissistic people (Hart & Adams, 2014). Hart and Adams (2014) found that grandiose narcissists liked others who were described as possessing a narcissistic trait (e.g., *aggressive*, *rude*, *arrogant*, *bossy*, *selfish*, *flashy*, *sensitive* [r], *gentle* [r], *timid* [r], *modest* [r], *submissive* [r]) compared to less narcissistic participants. Burton et al. (2017) later showed that narcissistic tolerance is due to perceived similarity; recognizing similarities to narcissistic others leads high narcissism individuals to see the other person in a more positive light, leading to increased liking. Additionally, the similarity-liking principle is more pronounced in individuals who like themselves (Klohen & Mendelsohn, 1998). Since narcissists like themselves and think favorably of their own narcissistic traits (Campbell, Bosson, Goheen, Lakey, & Kernis, 2007), this may lead narcissists to be more accepting of others' narcissistic traits, regard those others more positively and to like them more (Burton et al., 2017; Hart & Adams, 2014).

Previous research also suggests a possible connection between perceived similarity and perspective taking in narcissists. Research on the kinds of charitable appeals that may be more likely to elicit empathy and prosocial behavior from grandiose narcissists found that high

narcissism participants compared to low narcissism participants, reported more intentions toward prosocial behavior (i.e., donating intentions to a target person in need) when the appeals directed them to place themselves in the target's situation (Kang & Lakshmanan, 2018). This form of appeal may encourage perspective taking by leading one to project oneself onto the potential recipient of help, which increased donor intentions among narcissists. This effect for narcissists, however, was eliminated when projecting the self onto the other was made more difficult or impossible by creating dissimilarities between the self and potential recipient, such as when the recipient was an animal rather than human, or a different gender suffering from a gender-specific illness (Kang & Lakshmanan, 2018). Hence, the extent to which narcissists are able to take others' perspectives, even when encouraged directly to do so, may depend on their degree of similarity to those others as this may affect the ease with which they are able to imagine themselves in the other's place.

Overview of Studies

Little research has examined factors that may encourage empathy from narcissists outside of instructed perspective taking. Hence, we will highlight narcissistic similarities between participants and a target individual to study whether highly narcissistic participants are more likely to spontaneously empathize with a more narcissistic target who describes a personal difficulty (i.e., their struggles with a recent romantic breakup). All studies included the use of audio recordings from confederates. Confederates recorded three sets of scripted interviews to establish different target conditions with varying levels of narcissism (script adapted from Burton et al., 2017). Participants were randomly assigned to listen to one set of target responses.

To examine the effect of similarity in perceived trait narcissism on empathy in narcissists, Study 1 first evaluated whether manipulating target narcissism (i.e., non-narcissistic, moderately-narcissistic, or highly-narcissistic target) led more narcissistic participants to perceived

themselves to be more similar to more narcissistic targets and to empathize with them more, compared to less narcissistic participants. Study 2 extended Study 1 by also examining whether more narcissistic participants attribute less blame for a romantic breakup to a more narcissistic target, and view a more narcissistic target as less deserving of negative outcomes. We test whether these perceptions mediate effects of participant and target narcissism on empathy. Finally, Study 3 examined whether effects of participant and target narcissism on empathy and other outcomes depend on the target displaying antagonistic behaviors (e.g., asserting superiority and derogating others), which the manipulation of target narcissism in Studies 1 and 2 included. Accordingly, Study 3 manipulated the presence or absence of target antagonism in the interview scripts of the highly narcissistic target, creating three target conditions: non-narcissistic, non-antagonistically-narcissistic, or antagonistically-narcissistic targets.

Study 1

The purpose of Study 1 was to examine the effects of target narcissism on empathetic responses in participants with varying levels of narcissism. This study aimed to explore the relationships between participant narcissism, similarity in perceived trait narcissism with a target (by manipulating target narcissism), positive feelings toward that target (i.e., liking of the target and expected liking from the target), and empathy toward the target. By highlighting similarity in perceived trait narcissism between participants and a target person, we tested our hypotheses:

H1: Highly narcissistic participants, relative to less narcissistic participants, will empathize more with a target person who appears to be moderately or highly narcissistic.

H2: Highly narcissistic participants, relative to less narcissistic participants, will like and perceive more similarity toward a target person who appears to be moderately or highly narcissistic, and expect a moderately or highly narcissistic target to like them more (replicating Burton et al., 2017)

H3: The joint effect of participant and target narcissism on empathy (H1) will be mediated by perceived similarity. Hence, highly narcissistic participants, relative to less narcissistic participants will perceive more similarity toward a target person who appears to be moderately or highly narcissistic, causing highly narcissistic participants to empathize more with that target person.

It is expected that narcissistic participants will perceive a narcissistic target to be more similar to themselves than a non-narcissistic target, leading narcissistic participants to display more empathetic responses to the narcissistic target's emotional distress compared to the low-narcissism target. Study 1 was conducted simultaneously on a sample of Wilfrid Laurier undergraduate students (Study 1a) as well as a sample of Amazon Mechanical Turk (MTurk) workers (Study 1b). Both samples completed identical materials and procedures.

Method

Participants

Study 1a consisted of 236 participants in total recruited through the Psychology Research Experience Program's (PREP) online website. Participants completed the study on computers in-lab in exchange for partial course credit toward their psychology course. Data was analyzed from 232 undergraduate students (80.20% female). The mean age was 18.64 ($SD = 1.23$, range = 17–28) and most identified as Caucasian (69.40%). From the overall sample, four participants' data were excluded from analyses: two participants' data were excluded due to technical problems that prevented them from hearing the audio components of the study, and two participants' data were excluded due to the participant having suspicions about the study (i.e., guessing the purpose or indicating that the audio was completed by a confederate). Some participants who were excluded met more than one of these exclusion criteria.

Study 1b consisted of 540 participants in total recruited through Amazon's Mechanical Turk (MTurk). Participants completed the study online in exchange for a monetary compensation of \$1.00 USD. Data was analyzed from 488 MTurk participants (52% female). The mean age was 37.61 ($SD = 12.24$, range = 18-73) and most identified as Caucasian (74.7%). From the overall sample, 52 participants' data were excluded from analyses: 41 participants' data were excluded for having incomplete data (i.e., not completing approximately 20% or more of the study), 5 participants' data were excluded for not listening to one or more of the audio clips in the study, and 6 participants' data were excluded due to the participants having suspicions about the study (i.e., indicating that the audio was completed by a confederate). Some participants who were excluded met more than one of these exclusion criteria. Additionally, any participant's data that fell outside three standard deviations of the mean for any measure were excluded from analyses for that measure. All data exclusion criteria were decided a priori.

Materials and Procedure

All dependent variable correlations in this study are included in Appendix A – Correlations. All measures and materials used in this study are included in Appendix B – Study 1 Measures.

Participants were initially told that they would complete personality measures and listen to audio clips from a previous participant, to investigate how different personalities respond to other people's difficulties.

Trait narcissism

Participants first completed the 40-item Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988) at the beginning of the study, to assess their level of narcissism. Each item consists of two statements, one of which is more narcissistic than the other (e.g., 'I am not sure if I would make a good leader' and 'I see myself as a good leader'). Participants were instructed to

choose the statement they identified most with. A single index of narcissism was computed by summing responses to these items (MTurk sample: $\alpha = .91$; $M = 12.65$; $SD = 8.49$; PREP sample: $\alpha = .83$; $M = 13.38$; $SD = 6.14$).

Self-esteem

Participants then completed the Rosenberg Self-Esteem scale (Rosenberg, 1965). This measure was not of central interest to the hypothesis, but it was included as a control variable to distinguish effects of self-esteem from those of narcissism.

Preference for consistency

Next, participants completed the Preference for Consistency scale (Cialdini, Trost, & Newson, 1995). This measure was not of central interest to the hypothesis, but it was intended as a filler scale to draw some attention away from narcissism as the focal interest.

Interview audio clips and conditions

Following these surveys, participants were randomly assigned through the Qualtrics survey platform to listen to audio clips of an interview with a female target individual described as a past participant named Emily (who was actually a confederate following a script). Participants were told that Emily had participated in a previous journal study that contained an interview portion where she provided her honest response to seven interview questions designed to help others get to know her. The interview questions were listed on the computer screen for participants to read (e.g., ‘How do you feel when you unexpectedly become the center of attention?’) followed by an audio clip of the target’s response. Conditions differed on the target’s level of narcissism, and the same confederate completed the audio recordings for all three conditions. Depending on the condition participants were assigned to, they either heard high narcissistic responses (e.g., “What do you mean unexpectedly? I’m usually the center of

attention, so I'd sort of expect it."), moderate narcissistic responses (e.g., "I like being the center of attention; it gives me a chance to entertain people."), or non-narcissistic responses (e.g., "I don't necessarily like it, but sometimes you just have to go with it."). The interview questions and responses were adapted from Burton et al. (2017).

Perceived similarity

Participants then completed three questions that measured perceived similarity toward the target adapted from Burton et al. (2017) (e.g., "I think Emily and I are similar in a lot of ways"). Participants indicated how much they agreed with each question using a scale from 1 (*Strongly disagree*) to 10 (*Strongly agree*). A single index of perceived similarity was computed by averaging responses to these items (MTurk sample: $\alpha = .88$; $M = 13.66$; $SD = 8.05$; PREP sample: $\alpha = .92$; $M = 13.15$; $SD = 7.81$).

Liking

Participants completed seven items that measured how much participants liked the target (e.g., "I think Emily seems likable"). The items were adapted from Burton et al (2017), Liu, Bian, Gao, Ding, & Zhang (2016), and Mackinnon, Jordan, and Wilson (2011) and measured on a 10-point scale from 1 (*Strongly disagree*) to 10 (*Strongly agree*). A single index of liking was computed by averaging these items (MTurk sample: $\alpha = .98$; $M = 38.70$; $SD = 21.33$; PREP sample: $\alpha = .98$; $M = 35.04$; $SD = 18.93$).

Expected liking from the target

Participants completed seven questions adapted from Burton et al. (2017), and Hamstra, Sassenberg, Van Yperen, and Wisse (2014), that measured how much participants estimated the target would like them (e.g., "I think Emily would think I'm a pleasant person"). Participants indicated how much they agreed with each question using a scale from 1 (*Strongly disagree*) to 10 (*Strongly agree*). A single index of estimated liking from the target was computed by

averaging the items (MTurk sample: $\alpha = .47$; $M = 39.29$; $SD = 9.71$; PREP sample: $\alpha = .27$; $M = 38.29$; $SD = 6.97$).

Difficult experience audio clip

Participants then listened to an audio clip of the same target as in the interview audio clips, describe an emotionally difficult experience she was going through. Participants were told that this audio clip was one of Emily's monthly audio recordings from the journal study she participated in. The audio clip was prefaced with the question ostensibly posed to the target: "*Spend some time describing a significant challenge you've experienced in some detail. Describe the most significant thing that you've struggled with emotionally, recently.*" As with the earlier interview questions, the question was on the computer screen for participants to read, followed by an audio clip of the target's response. All participants listened to the same audio clip, in which the target describes a difficult romantic breakup. The audio clip was approximately four minutes and focused mainly on how the breakup affected the target and situations the target had to deal with after the breakup (e.g., living in the same house as her ex-boyfriend). The script was adapted from Hepper, Hart, and Sedikides (2014).

Empathy

Finally, participants completed a 23-item measure of empathy toward the target, adapted from Davis's (1983) Interpersonal Reactivity Index (IRI). The IRI measures four subscales of dispositional empathy: perspective taking (e.g., "I tried to look at Emily's side of her breakup"), empathetic concern (e.g., "I had concerned feelings for Emily"), personal distress (e.g., "I felt helpless when listening to Emily describe her breakup"), and fantasy scale (e.g., "I could imagine Emily's breakup happening to me"). Each item was rated on a 5-point scale ranging from 1

(*Does not describe me well*) to 5 (*Describes me very well*). The fantasy and personal distress scales are often omitted in interpersonal assessments; the fantasy scale does not fully measure empathy and the personal distress scale assesses discomfort and personal responses to situations instead of empathy (Jolliffe & Farrington, 2004; Reniers et al., 2011). For these reasons, a single index of empathy was computed by averaging items from the empathetic concern and perspective taking subscales (MTurk sample: $\alpha = .92$; $M = 34.81$; $SD = 10.86$; PREP sample: $\alpha = .90$; $M = 37.72$; $SD = 8.65$).

Positive and negative affect scale

The Positive and Negative Affect scale (PANAS; Watson, Clark, & Tellegen, 1988) was completed after the measure of empathy. Although this measure was not of central interest to the hypothesis, it was included to see if the manipulation affected mood.

Demographics

Demographic questions were completed at the very end of the study to better understand the sample. After the demographic questions, participants were debriefed, thanked, and compensated for their time.

Results

Preliminary analysis showed that gender did not significantly affect the findings below, so we excluded this variable from the reported analyses. We examined the association between participants' trait narcissism, target narcissism condition, and the outcome variables (perceived similarity, liking, expected liking from the target, and empathy toward the target) using a series of multiple regression analyses (one for each outcome). In Step 1 of each regression, we entered participants' trait narcissism (measured using the NPI, mean-centered). In Step 2, we added dummy-coded variables representing target narcissism conditions using the low-narcissistic target condition as the reference group, where: dummy code 1 (D1) compared the moderately-

narcissistic target condition to the low-narcissistic target condition, and coded for the low-narcissistic target (0), moderately-narcissistic target (1), and highly-narcissistic target (0); and dummy code 2 (D2) compared the highly-narcissistic target condition to the low-narcissistic target condition, and coded for the low-narcissistic target (0), moderately-narcissistic target (0), and highly-narcissistic target (1). In Step 3, we entered the interaction terms between participants' trait narcissism and condition (NPI x dummy code 1, NPI x dummy code 2). Significant interaction effects were decomposed by testing simple slopes between participant narcissism and each outcome within each of the experimental conditions.

Perceived Similarity (Study 1a: Undergraduate Sample)

To test the hypotheses that highly narcissistic participants will perceive more similarity toward a target person who appears to be highly narcissistic than do less narcissistic participants, we regressed perceived similarity on NPI scores, condition, and their interaction (see Table 1). The analysis revealed significant main effects for target narcissism such that: Overall, participants perceived more similarity to the non-narcissistic target than either the moderately-narcissistic target, $B = -6.70, p = .001$, or the highly-narcissistic target, $B = -13.39, p = .001$. As well, there was a significant interaction (R^2 change = .11, $F(2, 224) = 31.21, p = .001$) such that: Participants with high trait narcissism perceived significantly less similarity to the non-narcissistic target than did less narcissistic participants, $B = -.46, p = .001$, 95% confidence interval (CI) = $[-.64, -.28]$; whereas highly narcissistic participants perceived significantly more similarity to the moderately-narcissistic target, $B = .49, p = .001$, 95% confidence interval (CI) = $[.31, .67]$, and the highly-narcissistic target, $B = .33, p = .001$, 95% confidence interval (CI) = $[.15, .52]$, than did less narcissistic participants (see Figure 1).

Table 1

Hierarchical regression of perceived similarity on trait narcissism and experimental condition in Study 1a.

Variable	B	SE (B)	β	ΔR^2
Step 1				.01
NPI	.15	.08	.12	
Step 2				.50**
NPI	.12	.06	.10*	
D1	-6.70	.90	-.403**	
D2	-13.39	.87	-.81**	
Step 3				.11**
NPI	-.46	.09	-.36**	
D1	-6.97	.80	-.41**	
D2	-13.01	.78	-.79**	
NPI x D1	.95	.13	.44**	
NPI x D2	.80	.13	.35**	

* $p < 0.05$. ** $p < 0.001$.

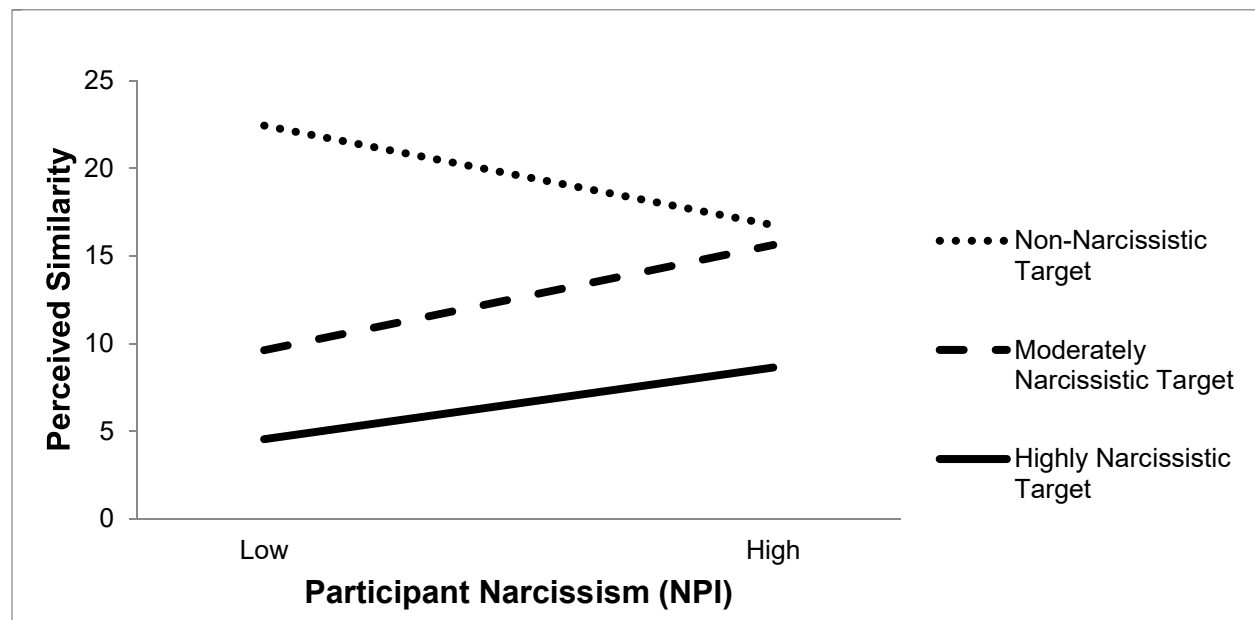


Fig. 1. The interaction of individual trait narcissism and experimental condition on perceived similarity in Study 1a.

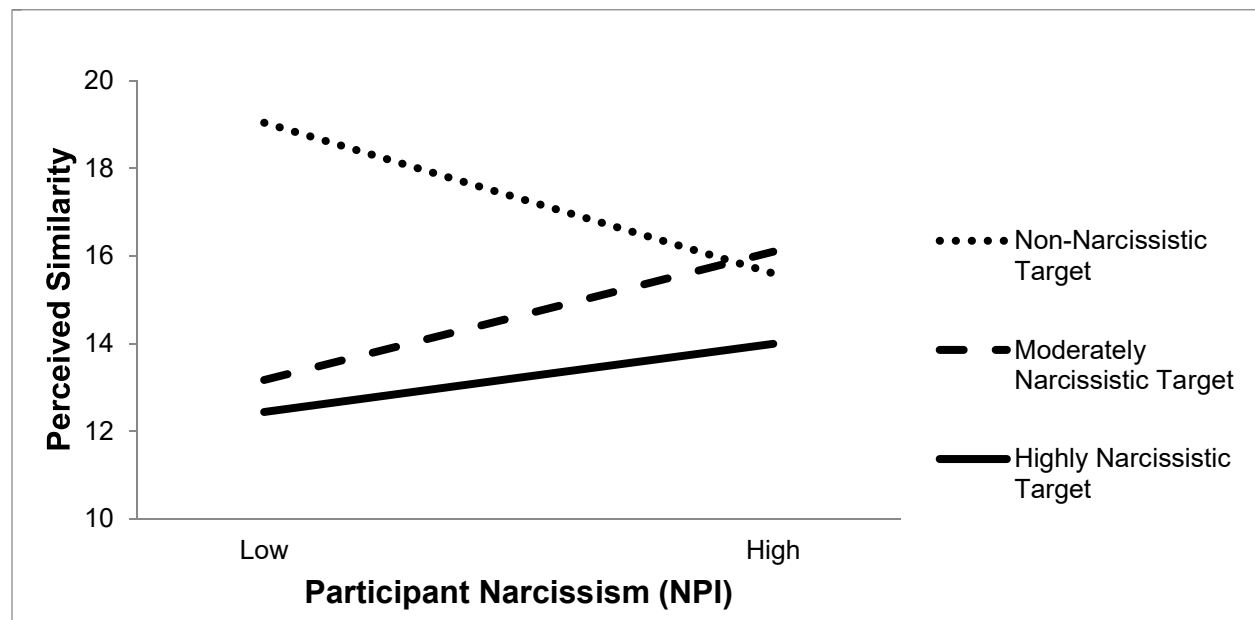
Perceived Similarity (Study 1b: MTurk Sample)

To test the hypotheses that highly narcissistic participants will perceive more similarity toward a target person who appears to be highly narcissistic than less narcissistic participants, we used a regression with interaction terms (see Table 2). Consistent with Study 1a, the analysis revealed significant main effects for target narcissism such that: Overall, participants perceived more similarity toward the non-narcissistic target than either the moderately-narcissistic target, $B = -6.60, p = .001$, or the highly-narcissistic target, $B = -11.95, p = .001$. As well, there was a significant interaction (R^2 change = .14, $F(2, 480) = 75.61, p = .001$) with patterns consistent with Study 1a, such that: Highly narcissistic participants perceived significantly less similarity to the non-narcissistic target than less narcissistic participants, $B = -.34, p = .001$, 95% confidence interval (CI) = $[-.44, -.24]$; and highly narcissistic participants perceived significantly more similarity to the moderately-narcissistic target, $B = .48, p = .001$, 95% confidence interval (CI) = $[.38, .57]$, and the highly-narcissistic target, $B = .35, p = .001$, 95% confidence interval (CI) = $[.24, .45]$, than did less narcissistic participants (see Figure 2).

Table 2

Hierarchical regression of perceived similarity on trait narcissism and experimental condition in Study 1b.

Variable	B	SE (B)	B	ΔR^2
Step 1				.02*
NPI	.14	.04	.15*	
Step 2				.38**
NPI	.16	.03	.17**	
D1	-6.60	.69	-.38**	
D2	-11.95	.69	-.70**	
Step 3				.14**
NPI	-.34	.05	-.36**	
D1	-6.40	.61	-.37**	
D2	-12.04	.60	-.37**	
NPI x D1	.81	.07	.50**	
NPI x D2	.68	.07	.40**	

* $p < 0.05$. ** $p < 0.001$.**Fig. 2.** The interaction of individual trait narcissism and experimental condition on perceived similarity in Study 1b.

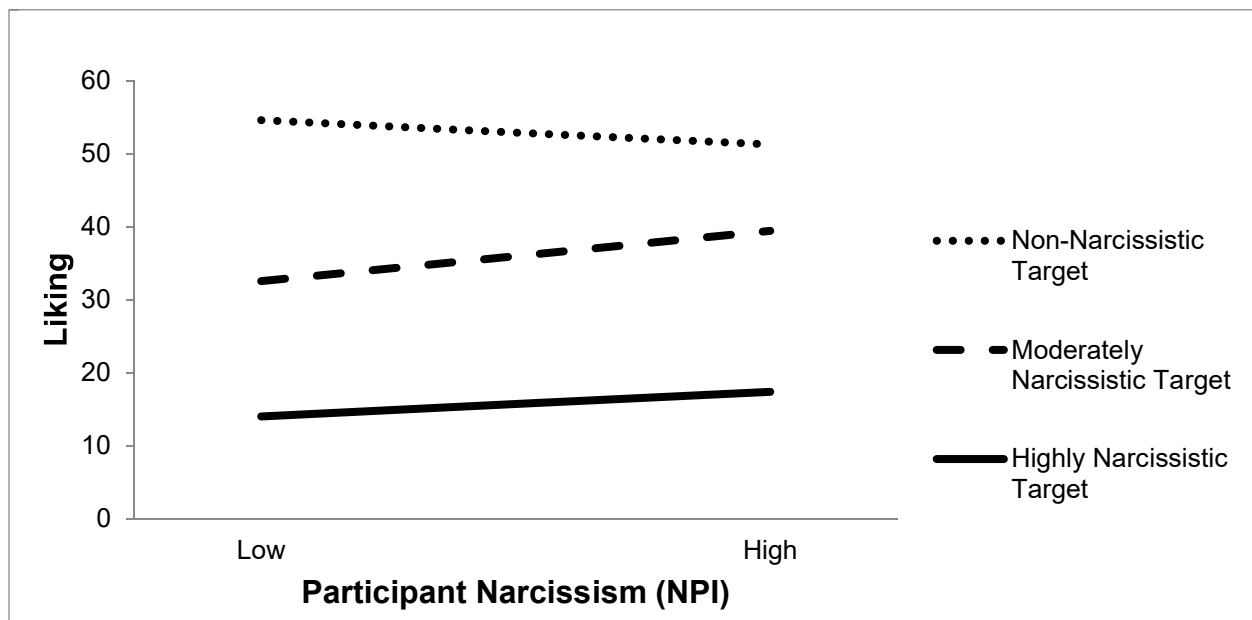
Liking (Study 1a: Undergraduate Sample)

To test the hypotheses that highly narcissistic participants will like a target person who appears to be highly narcissistic more than less narcissistic participants, we regressed liking on NPI scores, condition, and their interaction (see Table 3). The analysis revealed significant main effects for target narcissism such that: Overall, participants liked the non-narcissistic target more than either the moderately-narcissistic target, $B = -16.90, p = .001$, or the highly-narcissistic target, $B = -37.44, p = .001$. As well, there was a significant interaction (R^2 change = .01, $F(2, 224) = 4.54, p = .01$) such that: Participants with high trait narcissism liked the moderately-narcissistic target more than did less narcissistic participants, $B = .56, p = .005$, 95% confidence interval (CI) = [.17, .95] (see Figure 2); whereas participant narcissism was not related to liking of the non-narcissistic target, $B = -.27, p = .18$, 95% confidence interval (CI) = [-.67, .12], or highly-narcissistic target, $B = .28, p = .18$, 95% confidence interval (CI) = [-.12, .67] (see Figure 3).

Table 3

Hierarchical regression of liking on trait narcissism and experimental condition in Study 1a.

Variable	B	SE (B)	β	ΔR^2
Step 1				.01
NPI	.29	.20	.09	
Step 2				.67**
NPI	.19	.12	.06	
D1	-16.60	1.76	-.41**	
D2	-37.44	1.71	-.94**	
Step 3				.01*
NPI	-.27	.20	-.09	
D1	-16.90	1.74	-.41**	
D2	-37.21	1.69	-.93**	
NPI x D1	.83	.28	.16*	
NPI x D2	.55	.28	.10	

* $p < 0.05$. ** $p < 0.001$.**Fig. 3.** The interaction of individual trait narcissism and experimental condition on liking of the target in Study 1a.

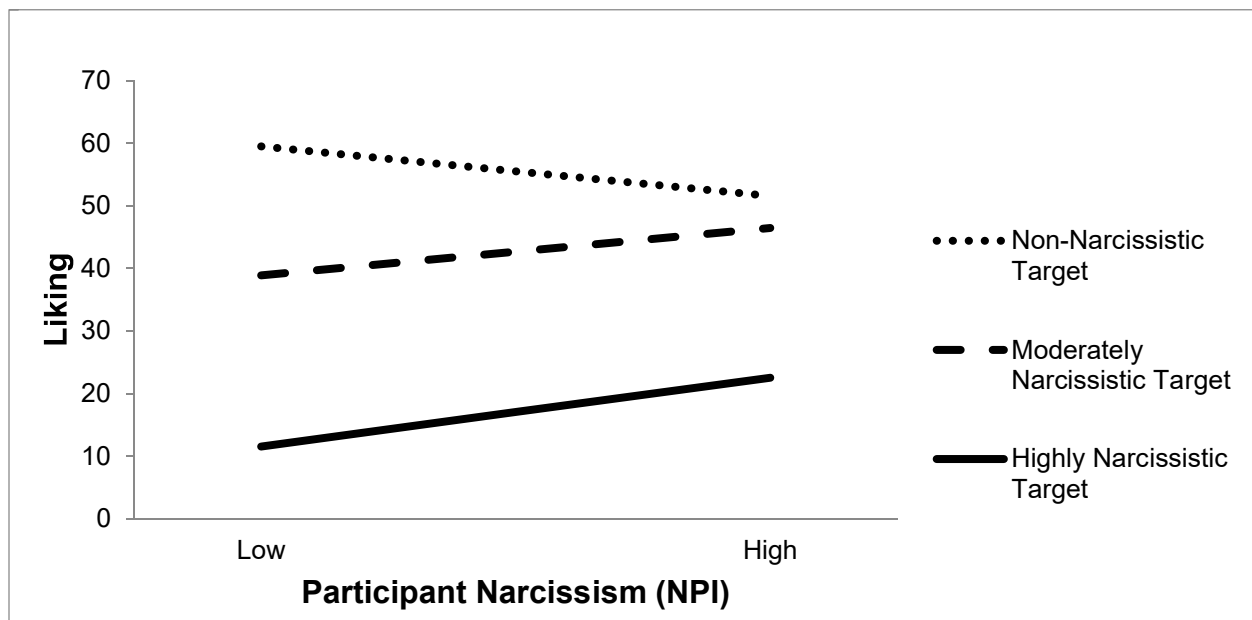
Liking (Study 1b: MTurk Sample)

To test the hypotheses that highly narcissistic participants will like a target person who appears to be highly narcissistic more than less narcissistic participants, we used a regression with interaction terms (see Table 4). Consistent with Study 1a, the analysis revealed significant main effects for target narcissism such that: Overall, participants liked the non-narcissistic target more than either the moderately-narcissistic target, $B = -13.02, p = .001$, or the highly-narcissistic target, $B = -38.24, p = .001$. As well, there was a significant interaction (R^2 change = .04, $F(2, 480) = 21.73, p = .001$) such that: Highly narcissistic participants liked the non-narcissistic target significantly less than did less narcissistic participants, $B = -.46, p = .001$, 95% confidence interval (CI) = $[-.70, -.21]$ (inconsistent with Study 1a); and highly narcissistic participants liked the moderately-narcissistic target, $B = .44, p = .001$, 95% confidence interval (CI) = $[.20, .68]$ (consistent with Study 1a), and the highly-narcissistic target, $B = .64, p = .001$, 95% confidence interval (CI) = $[.38, .89]$ (inconsistent with Study 1a), significantly more than did less narcissistic participants (see Figure 4).

Table 4

Hierarchical regression of liking on trait narcissism and experimental condition in Study 1b.

Variable	B	SE (B)	β	ΔR^2
Step 1				.002
NPI	.12	.11	.05	
Step 2				.57**
NPI	.20	.08	.08*	
D1	-13.02	1.56	-.29**	
D2	-38.24	1.54	-.85**	
Step 3				.04**
NPI	-.46	.12	-.18**	
D1	-12.86	1.50	-.28**	
D2	-38.47	1.48	-.85**	
NPI x D1	.90	.17	.21**	
NPI x D2	1.09	.18	.24**	

* $p < 0.05$. ** $p < 0.001$.**Fig. 4.** The interaction of individual trait narcissism and experimental condition on liking of the target in Study 1b.

Expected Liking from the Target (Study 1a: Undergraduate Sample)

To test the hypotheses that highly narcissistic participants will expect more liking from a target person who appears to be highly narcissistic than less narcissistic participants, we used a regression with interaction terms (see Table 5). The analysis revealed significant main effects for target narcissism such that: Overall, participants expected more liking from the non-narcissistic target than either the moderately-narcissistic target, $B = -3.05, p = .001$, or the highly-narcissistic target, $B = -9.56, p = .001$. As well, there was a significant interaction (R^2 change = .02, $F(2, 224) = 3.75, p = .03$) such that: Highly narcissistic participants expected significantly more liking from the moderately-narcissistic target, $B = .25, p = .02$, 95% confidence interval (CI) = [-0.04, .45], and the highly-narcissistic target, $B = .22, p = .04$, 95% confidence interval (CI) = [-0.01, .43], than did less narcissistic participants (see Figure 5). Participant narcissism was not significantly related to the amount of expected liking from the non-narcissistic target, $B = -.12, p = .26$, 95% confidence interval (CI) = [-0.32, .09] (see Figure 5).

Table 5

Hierarchical regression of expected liking from the target on trait narcissism and experimental condition in Study 1a.

Variable	B	SE (B)	β	ΔR^2
Step 1				.02*
NPI	.15	.07	.14*	
Step 2				.34**
NPI	.12	.06	.10	
D1	-3.05	.92	-.20*	
D2	-9.56	.89	-.65**	
Step 3				.02*
NPI	-.12	.10	-.10	
D1	-3.13	.91	-.21*	
D2	-9.40	.89	-.64**	
NPI x D1	.36	.15	.19*	
NPI x D2	.34	.15	.17**	

* $p < 0.05$. ** $p < 0.001$.

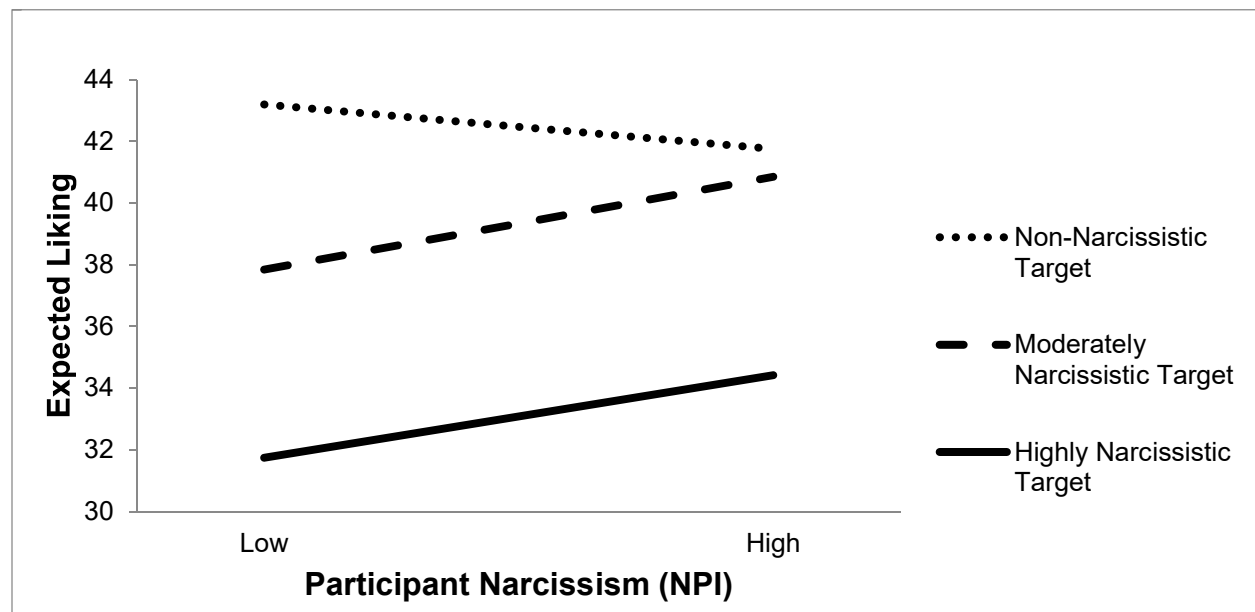


Fig. 5. The interaction of individual trait narcissism and experimental condition on expected liking from the target in Study 1a.

Expected Liking from the Target (Study 1b: MTurk Sample)

To test the hypotheses that highly narcissistic participants will expect more liking from a target person who appears to be highly narcissistic than less narcissistic participants, we used a regression with interaction terms (see Table 6). Consistent with Study 1a, the analysis revealed significant main effects for target narcissism such that: Overall, participants expected more liking from the non-narcissistic target more than either the moderately-narcissistic target, $B = -3.52, p = .001$, or the highly-narcissistic target, $B = -12.86, p = .001$. As well, there was a significant interaction (R^2 change = .02, $F(2, 480) = 5.87, p = .003$) with patterns consistent to Study 1a, such that: Highly narcissistic participants expected significantly more liking from the moderately-narcissistic target, $B = .28, p = .001$, 95% confidence interval (CI) = [.14, .42], and the highly-narcissistic target, $B = .20, p < .009$, 95% confidence interval (CI) = [.05, .35], than did less narcissistic participants (see Figure 6). There was no difference for expected liking from the non-narcissistic target between highly narcissistic participants and less narcissistic participants, $B = -.06, p = .43$, 95% confidence interval (CI) = [-.20, -.09].

Table 6

Hierarchical regression of expected liking from the target on trait narcissism and experimental condition in Study 1b.

Variable	B	SE (B)	β	ΔR^2
Step 1				.01*
NPI	.11	.05	.10	
Step 2				.32**
NPI	.14	.04	.12*	
D1	-3.52	.89	-.17**	
D2	-12.86	.88	-.62**	
Step 3				.02*
NPI	-.06	.07	-.05	
D1	-3.43	.88	-.17**	
D2	-12.89	.87	-.63**	
NPI x D1	.34	.10	.17*	
NPI x D2	.26	.11	.13*	

* $p < 0.05$. ** $p < 0.001$.

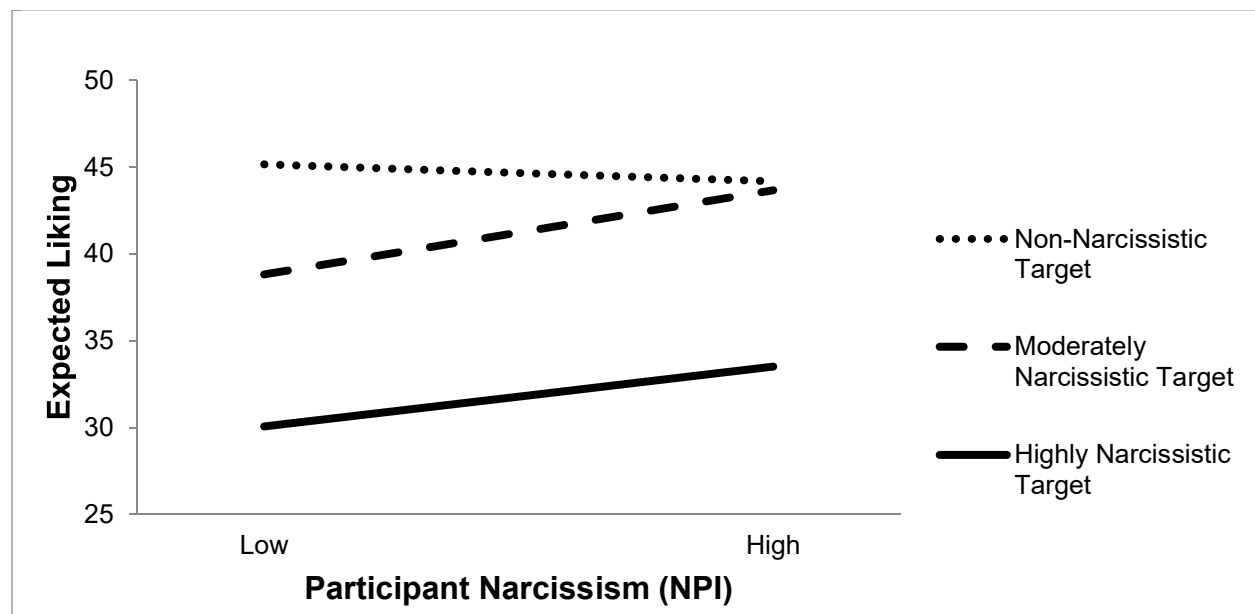


Fig. 6. The interaction of individual trait narcissism and experimental condition on expected liking from the target in Study 1b.

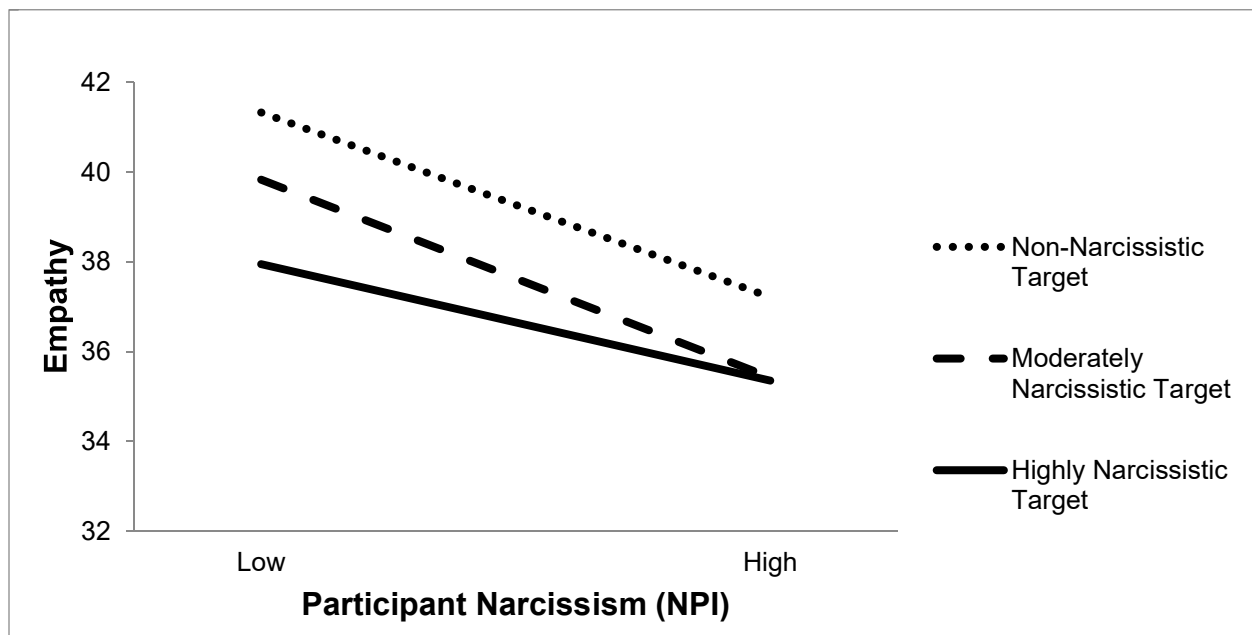
Empathy (Study 1a: Undergraduate Sample)

To test the hypotheses that highly narcissistic participants will feel more empathy toward a target person who appears to be highly narcissistic than less narcissistic participants, we conducted a regression with interaction terms (see Table 7). The analysis revealed a significant main effect for target narcissism such that: Overall, participants empathized less with the highly-narcissistic target than the non-narcissistic target, $B = -2.71, p = .04$. As well, there was a main effect of participant narcissism ($\beta = -.30, p = .001$) such that highly narcissistic participants showed less empathy overall, and no significant interaction (R^2 change = .002, $F(2, 224) = .25, p = .78$). However, highly narcissistic participants reported significantly less empathy toward the non-narcissistic target, $B = -.34, p = .04$, 95% confidence interval (CI) = $[-.65, -.02]$, and moderately-narcissistic target, $B = -.36, p = .02$, 95% confidence interval (CI) = $[-.67, -.05]$, compared to less narcissistic participants (see Figure 7). There were no significant differences in empathy toward the highly-narcissistic target, $B = -.21, p = .19$, 95% confidence interval (CI) = $[-.53, .11]$, between participants with high and low trait narcissism (see Figure 7).

Table 7

Hierarchical regression of empathy toward the target on trait narcissism and experimental condition in Study 1a.

Variable	B	SE (B)	β	ΔR^2
Step 1				.05*
NPI	-.30	.09	-.22*	
Step 2				.02
NPI	-.30	.09	-.22*	
D1	-1.72	1.36	-.09	
D2	-2.71	1.33	-.15*	
Step 3				.002
NPI	-.34	.16	-.24*	
D1	-1.64	1.38	-.09	
D2	-2.60	1.34	-.15	
NPI x D1	-.02	.22	-.01	
NPI x D2	.12	.23	.05	

* $p < 0.05$. ** $p < 0.001$.**Fig. 7.** The interaction of individual trait narcissism and experimental condition on empathy toward the target in Study 1b.

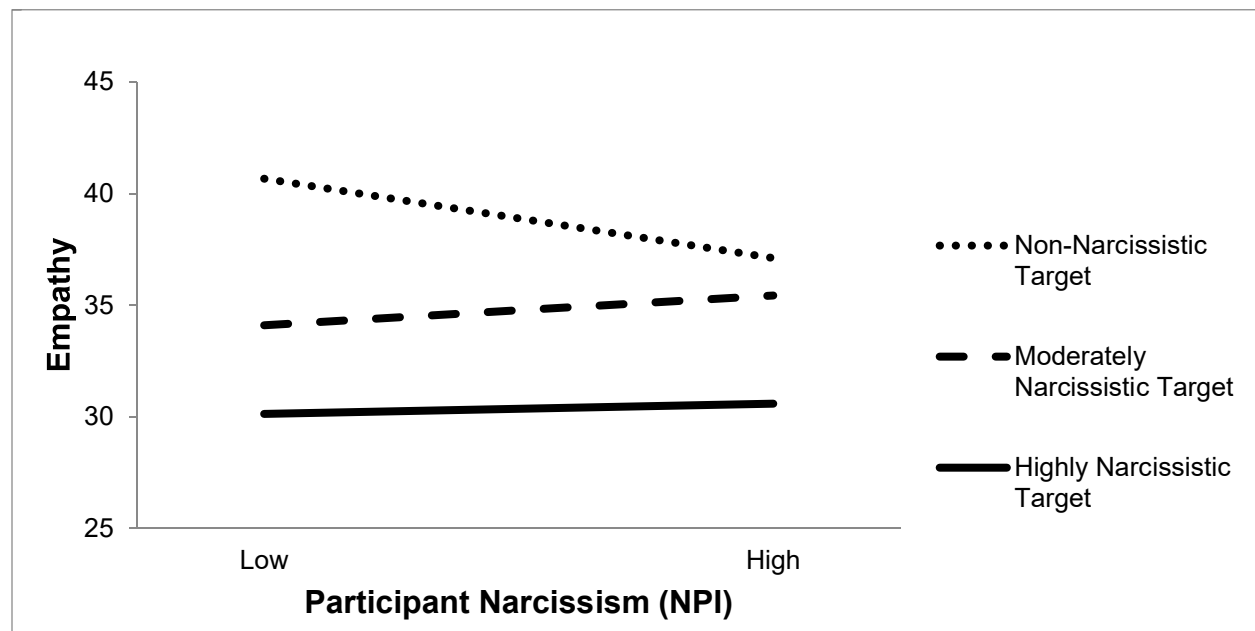
Empathy (Study 1b: MTurk Sample)

To test the hypotheses that highly narcissistic participants will feel more empathy toward a target person who appears to be highly narcissistic than less narcissistic participants, we used a regression with interaction terms (see Table 8). Consistent with Study 1a, the analysis revealed significant main effects for target narcissism such that: Overall, participants empathized more with the non-narcissistic target than either the moderately-narcissistic target, $B = -4.19, p = .001$, or the highly-narcissistic target, $B = -8.50, p = .001$. As well, inconsistent with Study 1a, there was no main effect of participant narcissism ($B = -.04, p = .52$). Study 1b also showed a marginally significant interaction (R^2 change = .01, $F(2, 480) = 2.56, p = .08$), although the interaction term between participant narcissism and the dummy variable comparing the non- and moderately-narcissistic targets was significant, suggesting that the relation between participant narcissism and empathy differs between the non- and moderately-narcissistic target conditions. Highly narcissistic participants experienced significantly less empathy toward the non-narcissistic target than did less narcissistic participants, $B = -.21, p = .03$, 95% confidence interval (CI) = $[-.39, -.02]$ (consistent with Study 1a). There were no significant differences in empathy toward the moderately-narcissistic target, $B = .08, p = .41$, 95% confidence interval (CI) = $[-.11, .26]$ (inconsistent with Study 1a), or the highly-narcissistic target, $B = .03, p = .79$, 95% confidence interval (CI) = $[-.17, .22]$ (consistent with Study 1a), between individuals with high and low trait narcissism (see Figure 8).

Table 8

Hierarchical regression of empathy toward the target on trait narcissism and experimental condition in Study 1b.

Variable	B	SE (B)	β	ΔR^2
Step 1				.001
NPI	-.05	.06	-.04	
Step 2				.11**
NPI	-.04	.06	-.03	
D1	-4.19	1.14	-.18**	
D2	-8.50	1.13	-.37**	
Step 3				.01
NPI	-.21	.09	-.16*	
D1	-4.12	1.14	-.18**	
D2	-8.53	1.13	-.37**	
NPI x D1	.28	.13	.13*	
NPI x D2	.23	.14	.10	

* $p < 0.05$. ** $p < 0.001$.**Fig. 8.** The interaction of individual trait narcissism and experimental condition on empathy toward the target in Study 1b.

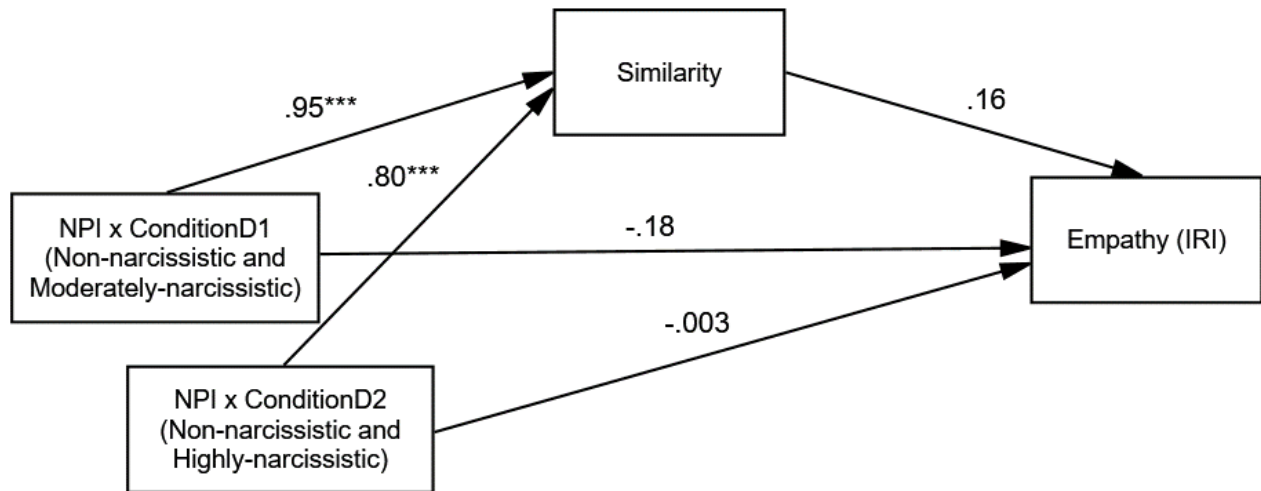
Mediation Analysis (Study 1a: Undergraduate Sample)

To test the hypothesis that the effect of participant and target narcissism on empathy will be mediated by perceived similarity (though the overall interaction was non-significant), we used PROCESS in SPSS to conduct a mediation analysis. The same dummy coding was used for target narcissism conditions, where: dummy code 1 (D1) compared the moderately-narcissistic target condition to the low-narcissistic target condition and represented low-narcissistic target (0), moderately-narcissistic target (1), and highly-narcissistic target (0); and dummy code 2 (D2) compared the highly-narcissistic target condition to the low-narcissistic target condition and represented low-narcissistic target (0), moderately-narcissistic target (0), and highly-narcissistic target (1). The two independent variables were: the interaction term of participant NPI and the dummy coded variable for the low-narcissistic target versus the moderately-narcissistic target (D1), represented as NPI x ConditionD1; and the interaction term of participant NPI and the dummy coded variable for the low-narcissistic target versus the highly-narcissistic target (D2), represented as NPI x ConditionD2. We included participant NPI, the dummy coded variables (i.e., D1 and D2), and the interactions as covariates. The significance of the indirect effect was tested using bootstrapping procedures on 1,000 bootstrapped samples.

The only significant paths were the NPI x ConditionD1 and NPI x ConditionD2 interaction terms on perceived similarity (see Figure 9). There were no significant indirect effects of the NPI x ConditionD1 or NPI x ConditionD2 interaction terms on empathy through similarity such that: in the low-narcissistic target condition similarity did not mediate the relationship, the bootstrapped unstandardized indirect effect was -.07, 95% CI [-.19, .04]; in the moderately-narcissistic target condition similarity did not mediate the relationship, the bootstrapped unstandardized indirect effect was .08, 95% CI [-.04, .22]; and in the highly-narcissistic target

condition similarity did not mediate the relationship, the bootstrapped unstandardized indirect effect was .05, 95% CI [-.01, .16] (see Figure 9).

The joint effect of participant and target narcissism on empathy (H1) will be mediated by perceived similarity.



Note. *** $p < .001$; ** $p < .01$; * $p < .05$

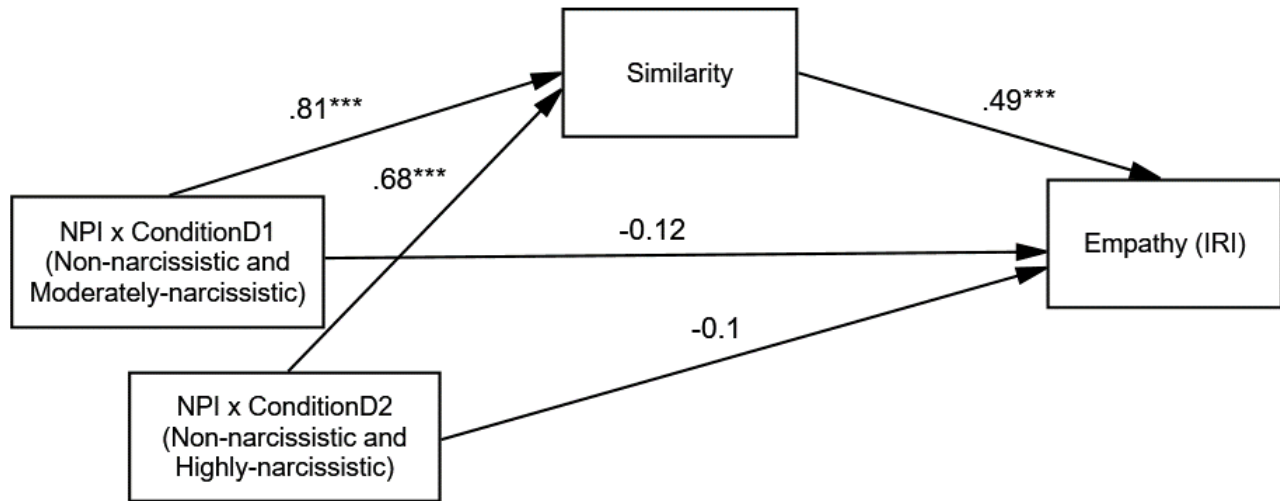
Fig. 9. Path model with standardized regression weights in Study 1a. Note. *** $p < .001$; ** $p < .01$; * $p < .05$. Main effects are included as covariates, but only the interactions are shown in the model.

Mediation Analysis (Study 1b: MTurk Sample)

To test the hypothesis that the effect of participant and target narcissism on empathy will be mediated by perceived similarity, the same program and method was used as in Study 1a.

There were significant paths for the NPI x ConditionD1 and NPI x ConditionD2 interaction terms on perceived similarity (consistent with Study 1a), and similarity on empathy (see Figure 10). Inconsistent with Study 1a, there were significant indirect effects of the NPI x ConditionD1 and NPI x ConditionD2 interaction terms on empathy through similarity such that: in the low-narcissistic target condition similarity negatively mediated the relationship, the bootstrapped unstandardized indirect effect was -.17, 95% CI [-.26, -.10]; in the moderately-narcissistic target condition similarity positively mediated the relationship, the bootstrapped

unstandardized indirect effect was .23, 95% CI [.14, .34]; and in the highly-narcissistic target condition similarity positively mediated the relationship, the bootstrapped unstandardized indirect effect was .17, 95% CI [.11, .26] (see Figure 10).



Note. *** $p < .001$; ** $p < .01$; * $p < .05$

Fig. 10. Path model with unstandardized regression weights in Study 1b. Note. *** $p < .001$; ** $p < .01$; * $p < .05$.

Main effects are included as covariates, but only the interactions are shown in the model.

Discussion

The results of Study 1a demonstrate a negative relation between participants' trait narcissism and empathy (for the overall effect of participant narcissism in the full model, if not the simple slope analyses). Narcissistic participants, overall, felt less empathy compared to less narcissistic participants. Furthermore, overall, participants empathized less with the highly-narcissistic target compared to the non-narcissistic target, and contrary to the first hypothesis, empathy was not significantly affected by the interaction of target narcissism with participant narcissism. However, simple slope tests in Study 1a suggest that narcissistic participants may be less empathetic than less narcissistic participants toward others' suffering when those others are low in narcissism but not when they are high in narcissism. Highly narcissistic participants did perceive more similarity toward the moderately- and highly-narcissistic targets, liked the

moderately-narcissistic target more than less narcissistic participants, and expected more liking from the moderately- and highly-narcissistic target compared to less narcissistic participants, which supports the second hypothesis. Additionally, inconsistent with the third hypothesis, similarity in perceived trait narcissism did not mediate the effect of the interaction of participant and target narcissism on empathy. These findings support previous research on narcissism and similarity. Similar to Burton et al.'s (2017) findings, highly narcissistic participants perceive more similarity to the highly-narcissistic target compared to less narcissistic participants. These findings also support existing studies that suggest that narcissistic individuals compared to less narcissistic individuals, possess a general lack of empathy for others (Hepper, Hart, Meek, Cisek, & Sedikides, 2014; Watson et al., 1984) although this may be particularly the case toward non-narcissistic targets.

The results of Study 1b also suggest a similar pattern to that of Study 1a: simple slope analyses suggest that narcissistic participants only showed less empathy than less narcissistic participants toward the non-narcissistic target but not toward the moderately- or highly-narcissistic target. Although the first hypothesis was not supported, the results suggest that, overall, participants empathized less with the highly-narcissistic target compared to the non-narcissistic target, and when the target was moderately- or highly-narcissistic, highly narcissistic participants empathized just as much with the target as did less narcissistic participants. Highly narcissistic participants also perceived significantly more similarity and liking toward, and expected more liking from the moderately- and highly-narcissistic targets than less narcissistic participants, supporting the second hypothesis. Moreover, the third hypothesis was also supported, suggesting the possibility that perceived similarity mediated the effect of similarity in perceived trait narcissism (the interaction between participant and target narcissism) on empathy.

The findings from Study 1b support previous research that suggests narcissists perceive more similarity and liking toward other narcissists than less narcissistic people (Burton et al., 2017; Hart & Adams, 2014). As well, the findings from Studies 1a and 1b suggest that contrary to existing studies, narcissists do not always empathize less with others compared to non-narcissists (e.g., Hepper et al., 2014; Watson et al., 1984) although this pattern of results needs to be interpreted with caution, because the overall interaction effects were not statistically significant. Existing research on narcissism and empathy does not consider target narcissism; hence, existing studies may have only consisted of narcissistic participants' responses toward non-narcissistic targets (or at least those who showed no obvious indications of narcissism). Studies 1a and 1b support previous research that suggests narcissistic individuals feel less empathy than less narcissistic individuals (e.g., Hepper et al., 2014; Watson et al., 1984); however, the current findings suggest a potential boundary to show that this may only be true when the target is non-narcissistic. When the target is moderately- or highly-narcissistic, narcissistic individuals reported similar amounts of empathy as less narcissistic individuals.

Although Study 1a and Study 1b had several inconsistencies in results, we suspect the inconsistencies may be due to differences in the samples. Study 1a consisted of data from only 232 participants, whereas Study 1b analyzed data from 488 participants. In terms of the perceived similarity and liking measures, the moderately-narcissistic target may have been more representative of the highly narcissistic participants from the undergraduate sample, whereas the highly-narcissistic target may have been more representative of the highly-narcissistic participants from the MTurk sample. This possibility may be consistent with distributions of narcissism scores in the two samples (overall participant narcissism for PREP sample: $M = 13.38$, $SD = 6.14$, range = 1-31; overall participant narcissism for MTURK sample: $M = 12.65$, $SD = 8.49$, range = 0-38). Although mean narcissism was similar in both samples, the variability

in narcissism scores was greater in the MTurk sample—perhaps suggesting that “higher” narcissism scores (in terms of SD units) in the MTurk sample were objectively higher. This may have influenced how participants perceived similarities toward the target and how much they liked the target. Notably, the target, Emily was also presented as being an undergraduate student and so, in all conditions, was more similar to participants in the undergraduate than MTurk sample.

Additionally, the difference in results for the empathy measure may be because the predicted effects for empathy are relatively subtle and require more statistical power to detect, which may explain why the MTurk sample produced results with more significant variables and a marginally significant interaction. As well, there is a significant difference in mean levels of empathy between the undergraduate and MTurk samples ($t_{558.33} = 3.87, p = .001$), with the MTurk sample showing less empathy (overall empathy for MTurk sample: $M = 34.81, SD = 10.86$, range = 11-55; overall empathy for PREP sample: $M = 27.17, SD = 7.87$, range = 9-44). We suspect that university undergraduate students may feel more empathy overall toward the target difficulty situation utilized in the study (i.e., the romantic relationship breakup audio) because the scenario is a more common experience in university settings—particularly with respect to the details of the breakup and its consequences. This may have been especially true for non-narcissistic individuals who are typically more empathetic. In this case, the familiar scenario may have led the non-narcissistic undergraduate individuals to even feel greater empathetic toward the highly-narcissistic target. This effect from the non-narcissistic undergraduate participants may also explain the negative simple slopes for the moderately- and highly-narcissistic targets in the undergraduate sample and the relatively positive simple slopes for the moderately- and highly-narcissistic targets in the MTurk sample. Although the pattern of results

is still inconsistent with predictions, the overall highly relatable situation for the undergraduate sample may have attenuated the narcissistic-similarity effect.

Study 2

Study 1b suggests that narcissistic participants may feel the same amount of empathy toward a narcissistic target as non-narcissistic participants do (rather than less), due to greater perceived similarity with the target. However, narcissistic targets—particularly highly narcissistic targets—received less empathy from both narcissistic and less narcissistic participants compared to non-narcissistic targets. In Study 2, we seek to replicate the findings from Study 1b, especially considering the inconsistencies between the results of Study 1a and Study 1b and ambiguous support for Study 1's first hypothesis (i.e., highly narcissistic participants, relative to less narcissistic participants, will empathize more with a target person who appears to be moderately or highly narcissistic). In addition, the interaction between participants' trait narcissism and target narcissism condition on empathy in Study 1b was approaching statistical significance (i.e., $p = .08$). Hence, we sought to replicate the results of Study 1b and, in doing so, collect data from a slightly larger sample to afford sufficient statistical power to detect effects. We sought to replicate the effect in an MTurk sample, because rates of empathy were higher overall in Study 1a than Study 1b, which might attenuate the predicted effect of similarity on empathy. To increase confidence in the replication, we pre-registered our procedures, predictions, and analysis on Open Science Framework (<https://osf.io>). We also included additional exclusion criteria in analyzing Study 2 that we had not considered or used while analyzing Studies 1a and 1b.

As well, in Study 2 we explored why people felt less empathy toward the highly-narcissistic target compared to the other targets in Study 1b. One possibility we considered was that relatively negative views of highly narcissistic targets, especially by less narcissistic

participants, might reflect blaming the narcissistic targets more for the breakup compared to the non-narcissistic target. Hence, we explored whether highly- and moderately-narcissistic targets are perceived to be more deserving of the breakup and more responsible for the breakup, and whether these perceptions are related to empathy.

Perceptions of deservingness may be related to the Just World Theory which posits that people generally believe the world is an orderly place where people's deservingness of good and bad outcomes is based on their actions (Hafer & Bègue, 2005; Lerner, 1980), and attributions of responsibility refer to the causes people assign to explain behaviors and events (Kassin, Fein, & Markus, 2010). Since non-narcissistic individuals generally view narcissists more negatively (e.g., Exline, Baumeister, Bushman, Campbell, & Finkel, 2004; McCullough, Emmons, Kilpatrick, & Mooney, 2003), possibly due to the negative characteristics associated with narcissistic personalities (e.g., grandiosity and aggression), we anticipate that people expect narcissists to generate more negative actions; hence, for narcissists to be more deserving of bad outcomes. Therefore, we examine how target narcissism can influence perceptions of the target's deservingness of negative outcomes (e.g., being broken up with and subsequent difficult living situation, struggling with friends and school, etc.), and whether participants attribute responsibility for the breakup to the target.

We predicted that participants will perceive less similarity to and like highly-narcissistic targets less, perceive them to be more deserving of bad outcomes, and attribute more responsibility to highly-narcissistic targets for their romantic breakup, relative to non-narcissistic targets. However, consistent with similarity and the narcissistic-tolerance theory (Hart & Adams, 2014), highly narcissistic participants will evaluate the highly-narcissistic target less harshly in terms of deservingness and attributions of responsibility for the breakup compared to less narcissistic participants.

In addition to the hypotheses tested in Study 1, we tested the hypotheses:

H4: Highly narcissistic participants, in comparison to less narcissistic participants, will perceive that the highly- and moderately-narcissistic targets deserved fewer negative outcomes.

H5: Highly narcissistic participants, in comparison to less narcissistic participants, will attribute less blame and responsibility for the breakup to the highly- and moderately-narcissistic targets.

H6: Perceptions of responsibility for the breakup and of how much the target deserved the breakup to happen will mediate the effects of participant narcissism and target narcissism on empathy.

Method

Participants

A G*Power analysis suggested a total sample size of 485 participants was needed to achieve 80% power (for a small effect, $d = .15$). To oversample and increase power relative to Study 1b, a total of 672 MTurk workers participated in this study in exchange for compensation.

The final sample consisted of 590 MTurk workers (48% female), the average age was 36.94 ($SD = 11.26$, range = 20-80), and most identified as Caucasian (73.6%). From the overall sample, 82 participants' data were excluded from analyses: 37 participants' data were excluded for completing the study unreasonably fast (i.e., in less than 5 minutes), 4 participants' data were excluded for completing the study unreasonably slow (i.e., in more than 2 hours), and 41 participants' data were excluded for having incomplete data (i.e., not completing 20% or more of the study or not completing 20% or more of any scale). Some participants who were excluded met more than one of these exclusion criteria. Additionally, any participant's data that fell

outside three standard deviations of the mean for any measure were excluded from analyses for that measure. All data exclusion criteria were decided a priori.

Materials and procedure

The same materials and procedure from Study 1 were used in Study 2, with the addition of a deservingness and attribution measure administered to participants after Davis's (1983) adapted Interpersonal Reactivity Index (IRI) for empathy. Participants first completed a measure of trait narcissism, then were randomly assigned to listen to one of three target interview conditions (i.e., highly narcissistic target, moderately narcissistic target, or non-narcissistic target), after which they completed measures of similarity, liking, and expected liking from the target. Next, participants listened to an audio recording of the target talking about a difficulty she had been struggling with (i.e., the romantic relationship breakup script), and finally participants completed measures of empathy, deservingness, and attribution.

All dependent variable correlations in this study are included in Appendix A – Correlations. All measures and materials used in this study are included in Appendix C – Study 2 Measures.

Deservingness

Participants used a 6-point scale (1 = *Strongly disagree*, 6 = *Strongly agree*) to rate a 14-item measure related to whether the target deserved bad outcomes after her romantic breakup (e.g., “Emily deserves to feel down after her breakup”), adapted from Callan, Kay, and Dawtry (2014), and Wood, Heimpel, Manwell, and Whittington (2009). A single index of deservingness of bad outcomes was computed from a mean score of the items ($\alpha = 0.93$; $M = 60.39$; $SD = 14.41$).

Attribution

Participants then answered four questions about who they thought was responsible for the target's romantic breakup, adapted from Peterson et al. (1982). Participants rated the following three questions on a 7-point scale: "*To what extent do you think Emily caused the breakup?*" (1 = *Totally not due to Emily*, 10 = *Totally due to Emily*); "*To what extent do you think Emily's boyfriend caused the breakup?*" (1 = *Totally not due to Emily's boyfriend*, 10 = *Totally due to Emily's boyfriend*); "*To what extent do you think something about their situation (i.e., circumstances beyond their control) caused the breakup?*" (1 = *Totally not due to their situation*, 7 = *Totally due to their situation*). For the fourth question of this scale, participants were also asked to specify who they thought was most responsible for the breakup between three choices (e.g., 'Emily', 'Emily's boyfriend', or 'Something about the situation [i.e., circumstances beyond their control]'). We only used responses to the first item to assess attributions toward Emily ($M = 4.38$; $SD = 1.49$).¹

Results

The same analysis procedure from Study 1 was used in Study 2.

Perceived Similarity

To test the hypothesis that highly narcissistic participants will perceive more similarity toward a target person who appears to be highly narcissistic than less narcissistic participants, we conducted a regression with interaction terms (see Table 9). Consistent with Study 1b, the

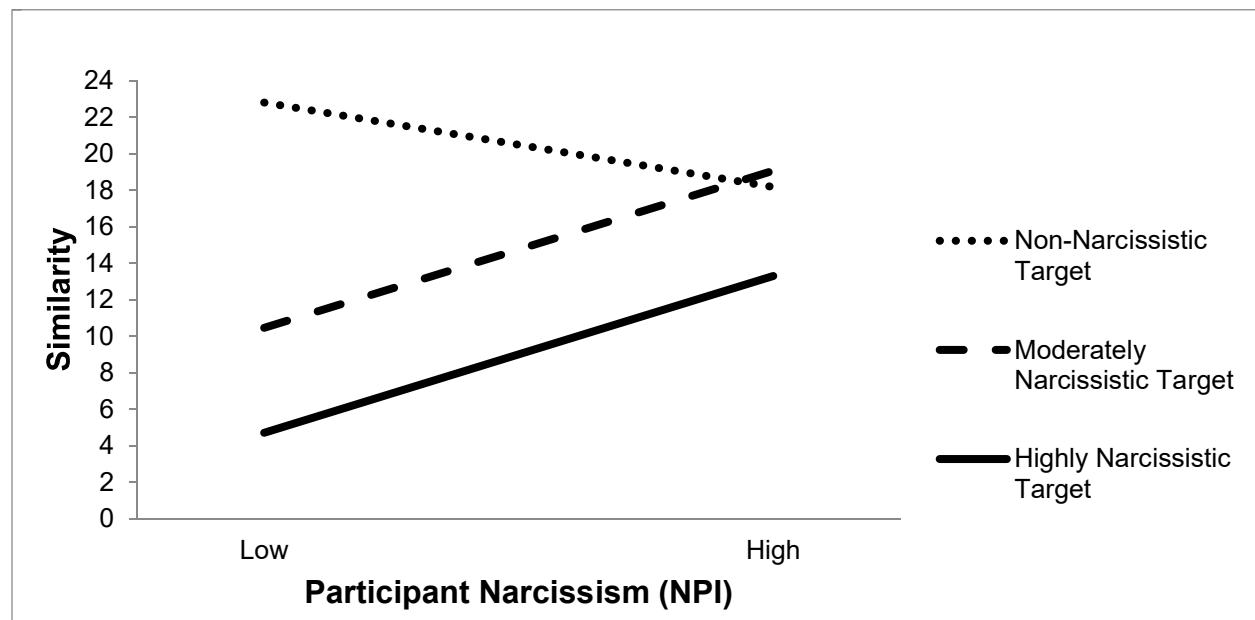
¹ The single index of attributions toward Emily did not contain the items that measured for attributions toward Emily's boyfriend, attributions toward the situation, and who was most responsible for the breakup because those items measured different aspects of attribution unrelated to the variable of interest (i.e., attributions toward Emily). When a single index of attribution toward Emily was computed by averaging attributions toward Emily and the reverse-coded attributions toward Emily's boyfriend and attributions toward the situation, the reliability of this index was low ($\alpha = .42$). An item analysis revealed little improvement if either of the reverse-coded items were removed from the index (alpha if reverse-coded item for attribution toward Emily's boyfriend deleted: $\alpha = .02$; alpha if reverse-coded item for attribution toward the situation deleted: $\alpha = .54$). Hence, the measure of attribution only contained the single item of attributions toward Emily.

analysis revealed significant main effects for target narcissism such that: Overall, participants perceived more similarity toward the non-narcissistic target than either the moderately-narcissistic target, $B = -5.69, p = .001$, or the highly-narcissistic target, $B = -11.37, p = .001$. As well, there was a significant interaction (R^2 change = .16, $F(2, 582) = 104.35, p = .001$) with patterns consistent with Study 1b, such that: Highly narcissistic participants perceived significantly less similarity to the non-narcissistic target than less narcissistic participants, $B = -.26, p = .001$, 95% confidence interval (CI) = $[-.34, -.18]$; and highly narcissistic participants perceived significantly more similarity to the moderately-narcissistic target, $B = .49, p = .001$, 95% confidence interval (CI) = $[.40, .57]$, and the highly-narcissistic target, $B = .48, p = .001$, 95% confidence interval (CI) = $[.40, .57]$, than less narcissistic participants (see Figure 11).

Table 9

Hierarchical regression of perceived similarity on trait narcissism and experimental condition in Study 2.

Variable	B	SE (B)	β	ΔR^2
Step 1				.06**
NPI	.22	.04	.24**	
Step 2				.34**
NPI	.21	.03	.24**	
D1	-5.69	.62	-.33**	
D2	-11.37	.62	-.66**	
Step 3				.16**
NPI	-.26	.04	-.29**	
D1	-5.73	.54	-.33**	
D2	-11.49	.53	-.67**	
NPI x D1	.75	.06	.46**	
NPI x D2	.74	.06	.48**	

* $p < 0.05$. ** $p < 0.001$.**Fig. 11.** The interaction of individual trait narcissism and experimental condition on perceived similarity in Study 2.

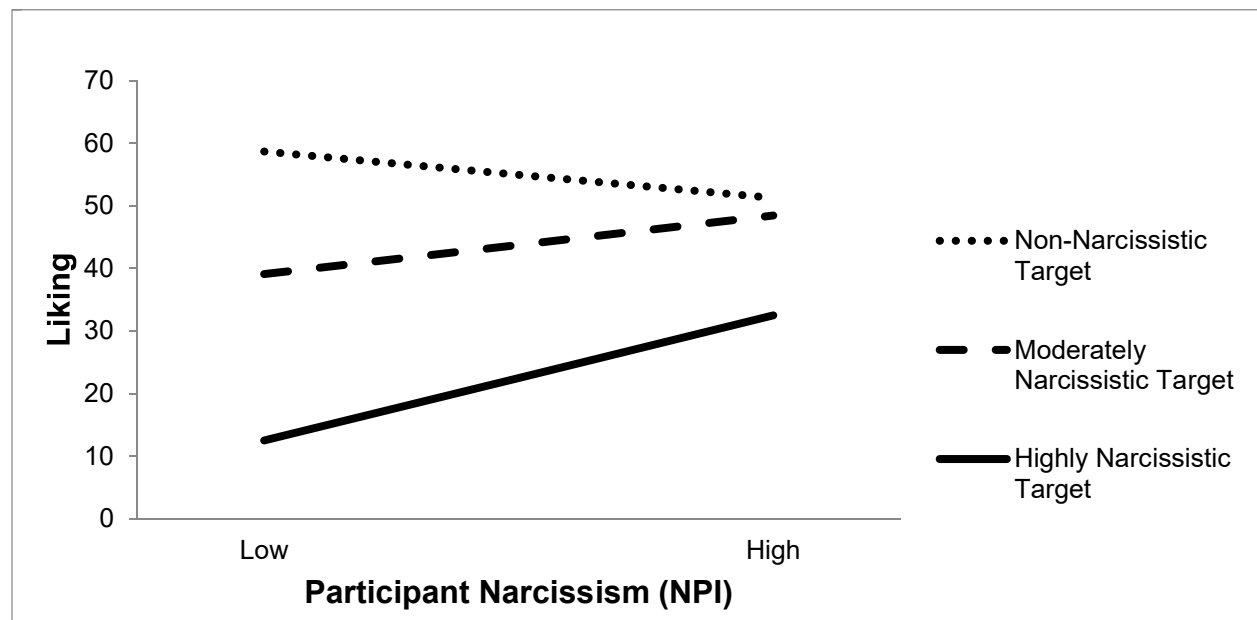
Liking

To test the hypotheses that highly narcissistic participants will like a target person who appears to be highly narcissistic more than less narcissistic participants, we conducted a regression with interaction terms (see Table 10). Consistent with Study 1b, the analysis revealed significant main effects for target narcissism such that: Overall, participants liked the non-narcissistic target more than either the moderately-narcissistic target, $B = -11.04, p = .001$, or the highly-narcissistic target, $B = -32.26, p = .001$. As well, there was a significant interaction (R^2 change = .08, $F(2, 582) = 53.75, p = .001$) such that: Highly narcissistic participants liked the non-narcissistic target significantly less than less narcissistic participants, $B = -.42, p = .001$, 95% confidence interval (CI) = $[-.62, -.21]$ (consistent with Study 1b); and highly narcissistic participants liked the moderately-narcissistic target, $B = .53, p = .001$, 95% confidence interval (CI) = $[.30, .75]$ (consistent with Study 1b), and the highly-narcissistic target, $B = 1.13, p = .001$, 95% confidence interval (CI) = $[.91, 1.34]$ (consistent with Study 1b), significantly more than less narcissistic participants (see Figure 12).

Table 10

Hierarchical regression of liking on trait narcissism and experimental condition in Study 2.

Variable	B	SE (B)	β	ΔR^2
Step 1				0.03**
NPI	.39	.09	.17**	
Step 2				0.44**
NPI	.38	.07	.17**	
D1	-11.04	1.47	-.26**	
D2	-32.263	1.47	-.75**	
Step 3				0.08**
NPI	-.42	1.0	-.19**	
D1	-11.19	1.35	-.26**	
D2	-32.48	1.35	-.75**	
NPI x D1	.95	.15	.23**	
NPI x D2	1.54	.15	.39	

* $p < 0.05$. ** $p < 0.001$.**Fig. 12.** The interaction of individual trait narcissism and experimental condition on liking of the target in Study 2.

Expected Liking from the Target

To test the hypotheses that highly narcissistic participants will expect more liking from a target person who appears to be highly narcissistic than less narcissistic participants, we conducted a regression with interaction terms (see Table 11). Consistent with Study 1b, the analysis revealed significant main effects for target narcissism such that: Overall, participants expected more liking from the non-narcissistic target more than either the moderately-narcissistic target, $B = -7.39, p = .001$, or the highly-narcissistic target, $B = -24.71, p = .001$. As well, there was a significant interaction (R^2 change = .05, $F(2, 582) = 27.08, p = .001$) with patterns consistent with Study 1b, such that: highly narcissistic participants expected significantly more liking from the moderately-narcissistic target, $B = .46, p = .001$, 95% confidence interval (CI) = [.25, .67], and the highly-narcissistic target, $B = .83, p = .001$, 95% confidence interval (CI) = [.63, 1.03], than less narcissistic participants (see Figure 13). Consistent with Study 1b, there was no significant relation between participant narcissism and expected liking from the low-narcissistic target, $B = -.19, p = .06$, 95% confidence interval (CI) = [-.38, .01] (see Figure 13).

Table 11

Hierarchical regression of expected liking from the target on trait narcissism and experimental condition in Study 2.

Variable	B	SE (B)	β	ΔR^2
Step 1				.03**
NPI	.36	.08	.19**	
Step 2				.37**
NPI	.35	.06	.18**	
D1	-7.39	1.32	-.20**	
D2	-24.71	1.32	-.68**	
Step 3				0.05**
NPI	-.19	.10	-.10	
D1	-7.49	1.26	-.21**	
D2	-24.85	1.26	-.68**	
NPI x D1	.65	.14	.19**	
NPI x D2	1.02	.14	.31**	

* $p < 0.05$. ** $p < 0.001$.

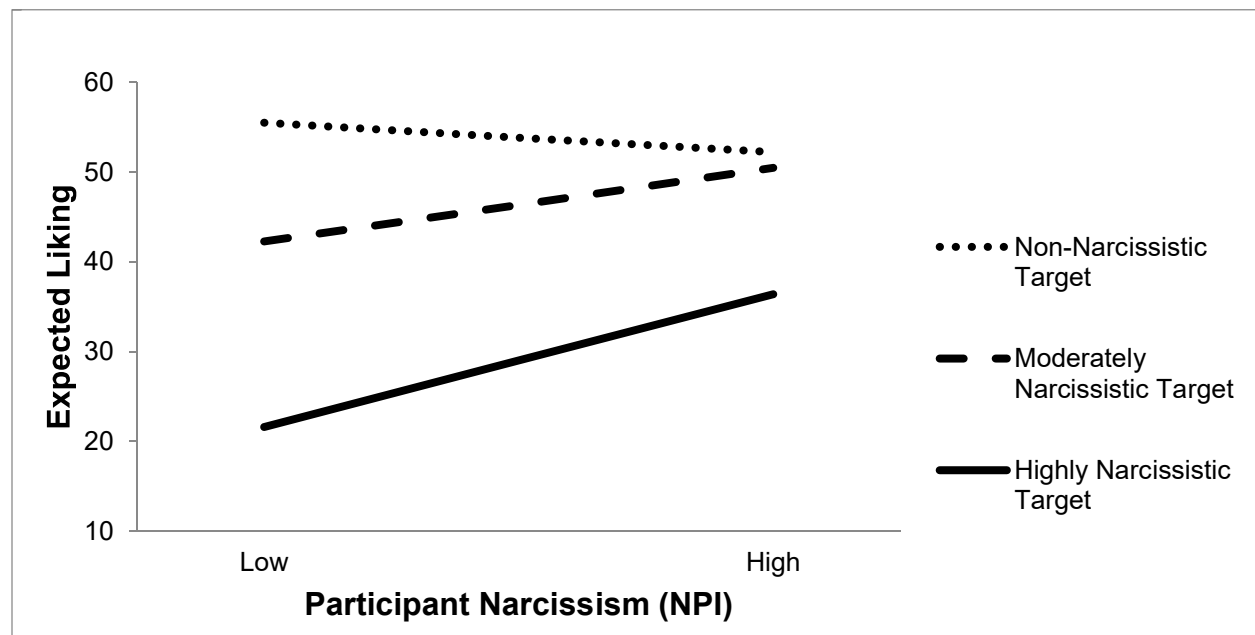


Fig. 13 The interaction of individual trait narcissism and experimental condition on expected liking from the target in Study 2.

Empathy

To test the hypotheses that highly narcissistic participants will feel more empathy toward a target person who appears to be highly narcissistic than less narcissistic participants, we conducted a regression with interaction terms (see Table 12). Consistent with Study 1b, the analysis revealed significant main effects for target narcissism such that: Overall, participants empathized more with the non-narcissistic target than either the moderately-narcissistic target, $B = -.25, p = .01$, or the highly-narcissistic target, $B = -6.11, p = .001$. As well, there was a significant interaction (R^2 change = .04, $F(2, 582) = 13.70, p = .001$) such that: highly narcissistic participants experienced significantly less empathy toward the non-narcissistic target than did less narcissistic participants, $B = -.28, p = .001$, 95% confidence interval (CI) = $[-.43, -.13]$ (consistent with Study 1b); and highly narcissistic participants experienced significantly more empathy toward the highly-narcissistic target, $B = .28, p = .001$, 95% confidence interval (CI) = $[.13, .44]$ (inconsistent with Study 1b), than did less narcissistic participants (see Figure 14). Consistent with Study 1b, there was no significant relation between participant narcissism and empathy toward the moderately-narcissistic target, $B = .05, p = .58.$, 95% confidence interval (CI) = $[-.12, .21]$ (see Figure 14).

Table 12

Hierarchical regression of empathy toward the target on trait narcissism and experimental condition in Study 2.

Variable	B	SE (B)	β	ΔR^2
Step 1				.0001
NPI	.01	.05	.01	
Step 2				.06**
NPI	.01	.05	.01	
D1	-2.54	1.00	-.12*	
D2	-6.11	1.00	-.28**	
Step 3				.04**
NPI	-.28	.08	-.24**	
D1	-2.59	.97	-.12*	
D2	-6.19	.97	-.28**	
NPI x D1	.33	.11	.16*	
NPI x D2	.56	.11	.28**	

* $p < 0.05$. ** $p < 0.001$.

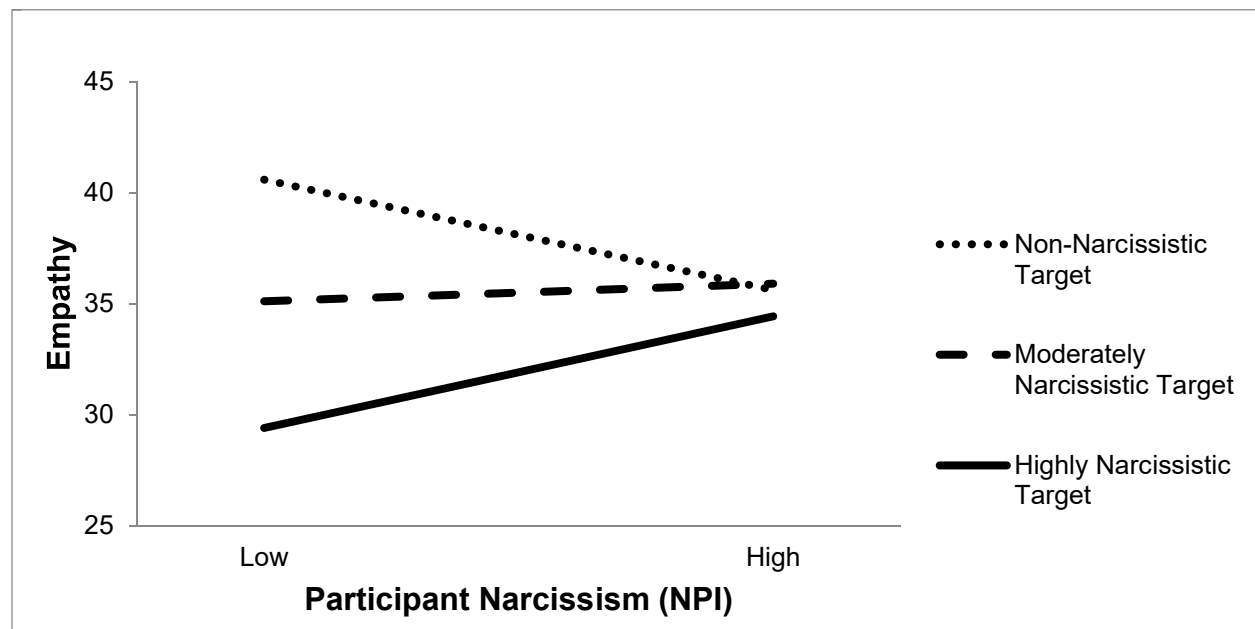
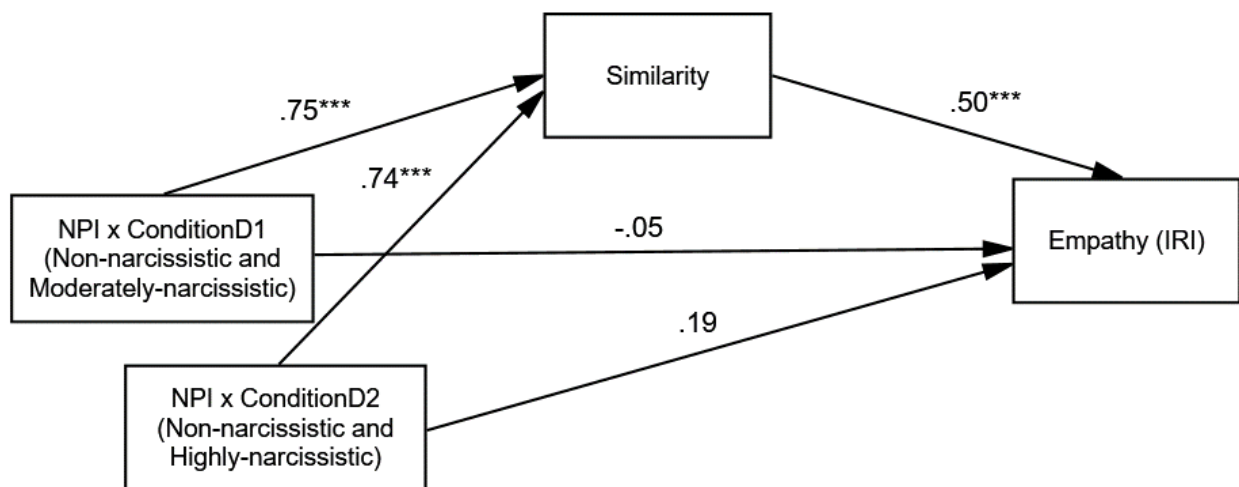


Fig. 14. The interaction of individual trait narcissism and experimental condition on empathy toward the target in Study 2.

Mediation Analysis (Perceived Similarity)

To test the hypothesis that the effect of participant and target narcissism on empathy will be mediated by perceived similarity, the same program and procedure was used as Study 1a and 1b.

Consistent with Study 1b, paths for the NPI x ConditionD1 and NPI x ConditionD2 interaction terms on perceived similarity and similarity on empathy were significant (see Figure 15). There were significant indirect effects of the NPI x ConditionD1 and NPI x ConditionD2 interaction terms on empathy through similarity with patterns consistent to Study 1b, such that: in the low-narcissistic target condition, similarity negatively mediated the relationship, the bootstrapped unstandardized indirect effect was -.13, 95% CI [-.20, -.08]; in the moderately-narcissistic target condition similarity positively mediated the relationship, the bootstrapped unstandardized indirect effect was .24, 95% CI [.17, .33]; and in the highly-narcissistic target condition similarity positively mediated the relationship, the bootstrapped unstandardized indirect effect was .24, 95% CI [.16, .35] (see Figure 15).



Note. *** $p < .001$; ** $p < .01$; * $p < .05$

Fig. 15. Path model with unstandardized regression weights in Study 2. Note. *** $p < .001$; ** $p < .01$; * $p < .05$.

Deservingness

To test the hypotheses that highly narcissistic participants, in comparison to less narcissistic participants, will perceive that the highly- and moderately-narcissistic targets deserved fewer negative outcomes, we conducted a regression with interaction terms (see Table 13). The analysis revealed a significant main effect for target narcissism such that: Overall, participants perceived less deservingness of bad outcomes to the non-narcissistic target than the moderately-narcissistic target, $B = 4.80, p = .001$, and the highly-narcissistic target, $B = 10.96, p = .001$. As well, there was a significant interaction (R^2 change = .03, $F(2, 582) = 12.39, p = .001$) such that: Highly narcissistic participants perceived significantly more deservingness of bad outcomes for the non-narcissistic target, $B = .95, p = .001$, 95% confidence interval (CI) = [.73, 1.17], and the moderately-narcissistic target, $B = .55, p = .001$, 95% confidence interval (CI) = [.31, .79], than did less narcissistic participants (see Figure 16). There were no significant results between participant narcissism and perceived deservingness of bad outcomes for the highly-narcissistic target between highly narcissistic and less narcissistic participants, $B = .14, p = .22$, 95% confidence interval (CI) = [-.09, .37] (see Figure 16).

Table 13

Hierarchical regression of deservingness toward the target on trait narcissism and experimental condition in Study 2.

Variable	B	SE (B)	β	ΔR^2
Step 1				.09**
NPI	.56	.07	.31**	
Step 2				.08**
NPI	.56	.07	.31**	
D1	4.80	1.48	.14*	
D2	10.96	1.48	.32**	
Step 3				.03**
NPI	.95	.11	.52**	
D1	4.89	1.45	.14*	
D2	11.07	1.45	.32**	
NPI x D1	-.39	.17	-.12*	
NPI x D2	-.80	.16	-.25**	

* $p < 0.05$. ** $p < 0.001$.

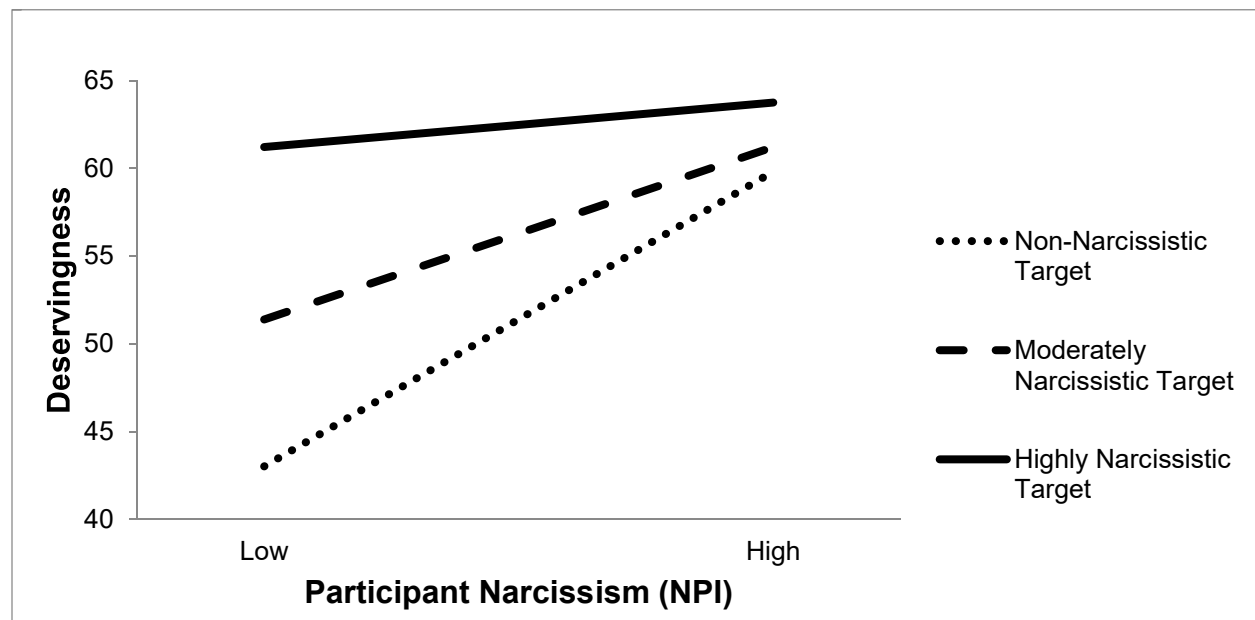


Fig. 16. The interaction of individual trait narcissism and experimental condition on deservingness toward the target in Study 2.

Attribution

To test the hypotheses that highly narcissistic participants, in comparison to less narcissistic participants, will attribute less blame and responsibility for the breakup to the highly- and moderately-narcissistic targets, we conducted a regression with interaction terms to analyze participants' attribution of blame for the breakup toward the target, Emily (see Table 14).

The analysis for attributing the breakup to Emily revealed significant main effects for target narcissism such that: Overall, participants attributed less blame toward Emily for the breakup when she was portrayed as a non-narcissistic target compared to a moderately-narcissistic target, $B = .52, p = .001$, or a highly-narcissistic target, $B = 1.10, p = .001$. As well, there was a significant interaction (R^2 change = .03, $F(2, 582) = 11.28, p = .001$) such that: Highly narcissistic participants attributed significantly more blame toward Emily for the breakup when she was portrayed as a non-narcissistic target, $B = .05, p = .001$, 95% confidence interval (CI) = [.03, .07]; and significantly less blame toward Emily for the breakup when she was portrayed as a highly-narcissistic target, $B = -.02, p = .03$, 95% confidence interval (CI) = [-.05, -.002], than did less narcissistic participants (see Figure 17). There were no significant association of participant narcissism and the attribution of blame toward Emily for the breakup when she was portrayed as a moderately-narcissistic target, $B = .02, p = .08$, 95% confidence interval (CI) = [-.002, .04] (see Figure 17).

Table 14

Hierarchical regression of the breakup attributed as Emily's fault on trait narcissism and experimental condition in Study 2.

Variable	B	SE (B)	β	ΔR^2
Step 1				.01*
NPI	.02	.01	.09*	
Step 2				.09**
NPI	.02	.01	.10*	
D1	.52	.14	.16**	
D2	1.10	.14	.35**	
Step 3				.03**
NPI	.05	.01	.29**	
D1	.53	.14	.17**	
D2	1.11	.14	.35**	
NPI x D1	-.03	.02	-.09	
NPI x D2	-.07	.02	-.25**	

* $p < 0.05$. ** $p < 0.001$.

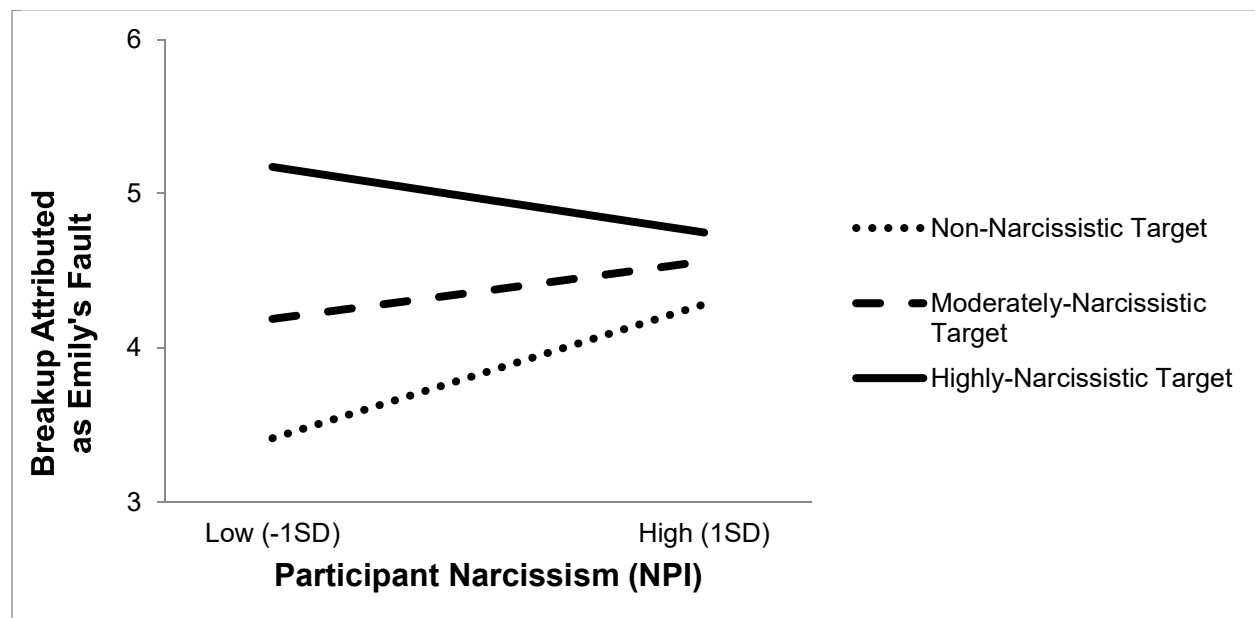


Fig. 17. The interaction of individual trait narcissism and condition on the breakup attributed as Emily's fault in Study 2.

Mediation Analysis (Deservingness and Attribution)

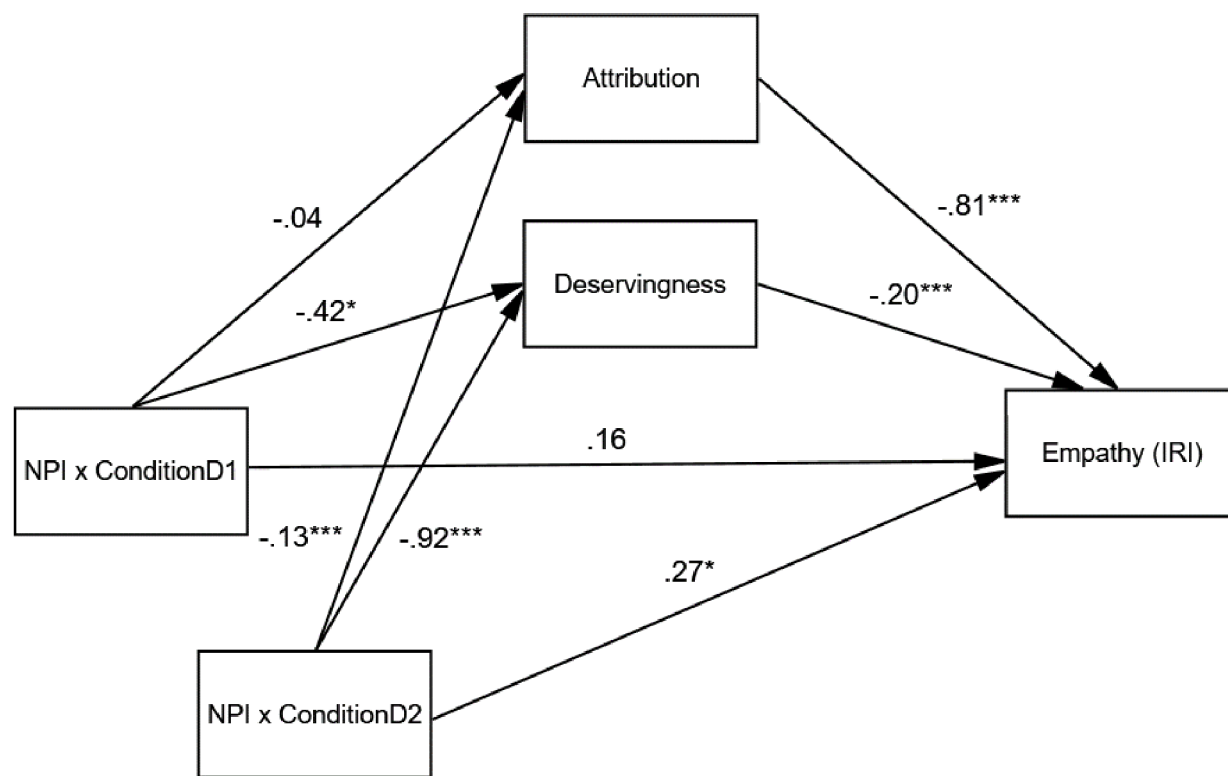
To test the hypothesis that perceptions of responsibility for the breakup and of how much the target deserved negative outcomes will mediate the effects of participant narcissism and target narcissism on empathy, the same program and procedure was used as Study 1a. The mediation variables were deservingness and attribution of blame for the breakup toward Emily.

The direct paths from the NPI x ConditionD1 interaction to deservingness; the NPI x ConditionD2 interaction to attribution, deservingness, and empathy; and the direct paths from attribution and deservingness to empathy were significant.

There were significant indirect effects of the NPI x ConditionD1 and NPI x ConditionD2 interaction terms on empathy through deservingness such that: in the low-narcissistic target condition deservingness negatively mediated the relationship, the bootstrapped unstandardized indirect effect was $-.16$, 95% CI $[-.24, -.10]$ (supporting hypothesis); and in the moderately-narcissistic target condition deservingness negatively mediated the relationship, the bootstrapped unstandardized indirect effect was $-.08$, 95% CI $[-.16, -.02]$ (supporting the hypothesis); but in the highly-narcissistic target condition deservingness did not mediate the relationship, the bootstrapped unstandardized indirect effect was $.02$, 95% CI $[-.03, .07]$ (opposing the hypothesis) (see Figure 18).

There were also significant indirect effects of the NPI x ConditionD1 and NPI x ConditionD2 interaction terms on empathy through attribution such that: in the moderately-narcissistic target condition attribution positively mediated the relationship, the bootstrapped unstandardized indirect effect was $.03$, 95% CI $[.004, .12]$ (supporting the hypothesis); and in the highly-narcissistic target condition attribution positively mediated the relationship, the bootstrapped unstandardized indirect effect was $.04$, 95% CI $[.07, .21]$ (supporting the hypothesis); but in the non-narcissistic target condition attribution did not mediate the

relationship, the bootstrapped unstandardized indirect effect was .02, 95% CI [-.02, .07] (opposing the hypothesis) (see Figure 18).



Note. *** $p < .001$; ** $p < .01$; * $p < .05$

Fig. 18. Path model with unstandardized regression weights in Study 2. Note. *** $p < .001$; ** $p < .01$; * $p < .05$.

Discussion

These findings largely replicated those from Study 1b. The results of Study 2 suggest that consistent with Study 1b, highly narcissistic participants are less empathetic than less narcissistic participants toward others' suffering when those others are low in narcissism, but not when they are high in narcissism; the overall interaction effect, moreover, was significant in Study 2.

However, unlike Study 1b and in support of the first hypothesis, when the target is highly-narcissistic, narcissistic participants empathized more than did less narcissistic participants.

Consistent with Study 1b and in support of the second hypothesis, highly narcissistic participants

compared to less narcissistic participants, perceived more similarity and liking toward, and expected more liking from the highly-narcissistic target. Additionally, consistent with Study 1b, the third hypothesis was also supported, suggesting that the joint effect of participant and target narcissism on empathy was mediated by perceived similarity.

In addition to the further support these findings provide for the effects of participant and target narcissism on similarity, liking, and expected liking (e.g., Burton et al., 2017; Hart & Adams, 2014), these findings also contribute to existing literature on narcissism and empathy. Study 2 suggests that contrary to existing research (e.g., Hepper et al., 2014), narcissistic individuals do not always feel less empathy compared to less narcissistic individuals. Instead, these findings suggest that the amount of empathy narcissists feel depends on the level of narcissism of the target. As well, the results of Study 2 suggest that perceived similarity mediates this relationship; suggesting a possible reason narcissistic individuals feel more empathy toward a narcissistic target compared to less narcissistic individuals, and fill a gap in existing literature on similarity and empathy in narcissists. Existing studies on similarity and narcissism (e.g., Burton et al., 2017; Hart & Adams, 2014) include narcissistic and non-narcissistic targets, but existing studies on empathy and narcissism (e.g., Hepper et al., 2014) do not specify target narcissism; it is possible that studies on empathy and narcissism only include targets that are perceived to be non-narcissistic (or for whom there is no diagnostic information indicating narcissism). This may explain why existing studies show that narcissistic individuals are less empathetic than less narcissistic individuals. But, when target narcissism is included, the results of Study 2 suggest that narcissistic individuals perceive more similarity toward a narcissistic target and are more empathetic toward a narcissistic target compared to less narcissistic individuals.

As well, contrary to the fourth hypothesis, these findings show that highly narcissistic participants did not perceive the moderately- and highly-narcissistic targets as less deserving of negative outcomes than did less narcissistic participants. Instead, the findings suggest that highly narcissistic participants perceived the moderately- and low-narcissistic participants as more deserving of negative outcomes than did less narcissistic participants. Surprisingly, narcissistic participants perceived the highly-narcissistic target as equally deserving of negative outcomes as less narcissistic participants. Moreover, in partial support of the fifth hypothesis, highly narcissistic participants did attribute less blame and responsibility for the breakup to the highly-narcissistic target but not the moderately-narcissistic target, than did less narcissistic participants. Similar to the deservingness finding, highly narcissistic participants also attributed more blame and responsibility for the breakup to the non-narcissistic target than did less narcissistic participants. Although highly narcissistic participants did not perceive the highly-narcissistic target as less deserving of negative outcomes compared to less narcissistic participants, highly-narcissistic participants attributed less blame for the breakup to the highly-narcissistic target compared to less narcissistic participants. Consistent with the sixth hypothesis, the mediation analysis indicated that deservingness and attribution did mediate the relation between the interaction of participant and target narcissism on empathy. Participants with higher trait narcissism perceived greater deservingness for low- and moderately-narcissistic targets, which lead to less empathy for these targets; and participants with higher trait narcissism attributed more blame to moderately- and highly-narcissistic targets, which also lead to less empathy for these targets.

This study provides novel findings in the areas of deservingness and attribution in relation to narcissism. The findings for attribution may suggest a possible link to similarity in perceived trait narcissism: Less narcissistic participants, in comparison to highly narcissistic

participants, attributed less blame to Emily when she was portrayed as non-narcissistic, and highly narcissistic participants, in comparison to less narcissistic participants, attributed less blame to Emily when she was portrayed as highly-narcissistic. This pattern of results extends existing studies on similarity and narcissism (e.g., Burton et al., 2017; Hart & Adams, 2014) and suggests a possible relationship between similarity and attributions for negative outcomes. As well, most of the literature on deservingness and narcissism focuses on narcissists' beliefs that they deserve special treatment (e.g., Bishop & Lane, 2002). Study 2 provides a new way of looking at this area by having participants rate the deservingness of a target and by considering participant narcissism and target narcissism. The findings add to the existing literature in this area by suggesting that perceptions of deservingness of negative outcomes for a highly-narcissistic target is not significantly affected by participant narcissism, but perceptions of deservingness for a non-narcissistic target is affected by participant narcissism. Such perceptions may also contribute to the overall lower degrees of empathy expressed toward highly narcissistic targets, relative to non-narcissistic targets, in each of Studies 1a, 1b, and 2.

Study 3

Although the findings from Study 1 and Study 2 suggested possible explanations for the relationship between narcissism and empathy, they portrayed the narcissistic targets as possessing characteristically antagonistic traits that are associated with narcissistic rivalry and socially undesirable aspects of narcissism (Back, Kufner, Dufner, Gerlach, Rauthmann, & Denissen 2013). Narcissistic rivalry is a type of antagonistic self-protection adopted to defensively protect grandiose self-views (Back et al., 2013). It consists of striving for supremacy, devaluation of others, and aggressiveness, and can lead to negative social outcomes for the individual, such as social rejection (Back et al., 2013; Brandts, Riedl, & van Winden, 2009). Inspection of the interview scripts used to manipulate target narcissism in Studies 1 and 2,

suggests that most of the interview responses from the highly- and moderately-narcissistic target conditions contained characteristics strongly representative of narcissistic rivalry with some aspects of narcissistic admiration. Narcissistic admiration is a type of bold self-enhancement which is associated with positive impressions (Back et al., 2013). It consists of striving for uniqueness, grandiose fantasies, and charmingness, which are used to gain favorable outcomes for the self (such as gaining social status, success, and praise) to reinforce one's grandiose fantasies about the self (Back et al., 2013). Hence, we are interested in exploring whether removing explicit aspects of narcissistic rivalry (e.g., claims of superiority, negative views expressed toward other people), will influence our results, and indicate whether perceptions of narcissistic rivalry (antagonism) are primarily driving the results of Studies 1b and 2.

In Study 3, we used an antagonistically-narcissistic target, a non-antagonistically-narcissistic target, and a low-narcissistic target. The antagonistically-narcissistic target is comprised of aspects of both narcissistic admiration and rivalry whereas the non-antagonistically-narcissistic target contained aspects of narcissistic admiration only. All target scripts for Study 3 are included in Appendix D – Study 3. The target interview scripts for these new target conditions were derived from the highly-narcissistic target scripts from Studies 1 and 2. Aspects of these scripts were modified to in order to accentuate or remove antagonistic aspects of narcissism depending on the condition. For example, the highly-narcissistic target response, “I’d say so. I’m very charming. When people don’t like me, it’s usually because they’re insecure with themselves” was preserved for the antagonistically-narcissistic target condition but changed by having the rivalry component consisting of devaluing others, removed to make the non-antagonistically narcissistic target condition response, “I’d say so. I’m very charming.” The low-narcissistic target is represented using the low-narcissistic target recordings from Studies 1 and 2.

Conditions differed from Studies 1 and 2 to highlight different aspects of narcissism. Participants were assigned to listen to either narcissistic responses with a focus on narcissistic admiration, the non-antagonistically-narcissistic target (e.g., 'What do you mean unexpectedly? I'm usually the center of attention, so I'd sort of expect it.');

narcissistic responses with a focus on narcissistic admiration and rivalry, the antagonistically-narcissistic target (e.g., 'What do you mean unexpectedly? I'm usually the center of attention, I'm more interesting than other people, so I'd sort of expect it.');

or a non-narcissistic/control condition response, the non-narcissistic target (i.e., 'I don't necessarily like it, but sometimes you just have to go with it.').

As well, although Studies 1 and 2 did not show any effects of participant gender, we wanted to explore possible target gender effects; mainly whether participants would report different opinions toward the narcissistic targets if the target were male. Since women are stereotyped as submissive (e.g., Prentice & Carranza, 2002; Rudman, Moss-Racusin, Glick, & Phelan, 2012) and women who violate these stereotypes are generally disliked (e.g., Rudman et al., 2012), we were interested in studying whether people's opinions of the narcissistic targets were influenced by her gender. Hence, there was a total of 2 (target gender: male, female) x 3 (target narcissism: antagonistically narcissistic, non-antagonistically narcissistic and low narcissism) target interview conditions.

The purpose of Study 3 is to explore whether the findings from Study 2 generalize to a male target and when the manipulation of target narcissism focuses only on behaviors more associated with narcissistic admiration and not narcissistic rivalry. We plan to test whether the findings from Studies 1-2 replicate when antagonism is removed from information about the highly-narcissistic target or whether they depend on the antagonistic aspects of narcissism. We will also test whether these results are moderated by target gender. We expect the antagonistically-narcissistic target and non-narcissistic target conditions to replicate the findings

of Study 2, as the previous hypothesis still apply to Study 3. As well, we will test whether the findings for participant narcissism, measured using the NPI, from Studies 1-2 replicate when grandiose narcissism is measured with a different scale, the Narcissistic Admiration and Rivalry Questionnaire (NARQ). Since the admiration component of the NARQ is highly correlated with the NPI (Back et al., 2013), we expect analysis with the admiration component of the NARQ to replicate the findings of Study 2. We will test whether antagonistic aspects of participant narcissism (rivalry) demonstrate the same pattern of results.

Method

Participants

A G*Power analysis suggested a total sample size of 485 participants was needed to achieve 80% power (for a small effect, $d = .15$). To oversample, a total of 753 MTurk workers participated in this study in exchange for compensation. Given the extra conditions, we aimed to oversample to ensure that the overall sample was larger than that used in Study 2.

The final sample consisted of 645 MTurk workers (48.6% female), the average age was 37.26 ($SD = 11.57$, range = 19-72), and most identified as Caucasian (68.1%). From the overall sample, 108 participants' data were excluded from analysis: 30 participants' data were excluded for completing the study unreasonably fast (i.e., in less than 5 minutes), 27 participants' data were excluded for completing the study unreasonably slow (i.e., in more than 2 hours), 45 participants' data were excluded for having incomplete data (i.e., not completing 20% or more of the study or not completing 20% or more of any scale), 4 participants' data were excluded for stating that they did not listen to all the audio files or could not hear one or more of the audio files clearly, and 2 participants' data were excluded for stating that they were distracted while taking the study or did not take the study seriously. Some participants who were excluded met more than one of these exclusion criteria.

In addition to the exclusion and analysis criteria from Study 2, in Study 3 missing data from scales with less than 20% of missing data, was replaced with multiple imputation using the participant's mean of that measure. This method was used for 8 participants who were missing two or fewer responses for one measure. All data exclusion criteria were decided a priori.

Materials and Procedure

The same materials and procedure from the previous studies were used in Study 3, with the addition of a male target, modifications to the target interview conditions and script, the addition of the Narcissistic Admiration and Rivalry Questionnaire (NARQ; Back et al., 2013) after the NPI, and a target narcissism manipulation check (adapted from Burton et al., 2017) after the deservingness and attribution measures. Participants first completed a measure of trait narcissism (NPI) and the narcissistic admiration and rivalry questionnaire, then were randomly assigned to listen to one of three target interview conditions (i.e., antagonistically-narcissistic target, non-antagonistically-narcissistic target, or non-narcissistic target) in one of two target genders (i.e., male or female), after which they completed measures of similarity, liking, and expected liking from the target. Next, participants listened to an audio recording of the same target from the interview talking about a difficulty he/she has been struggling with, and participants then completed measures of empathy, deservingness, and attributions for the breakup. Finally, participants completed a target narcissism manipulation check that was added to Study 3, to test whether the more narcissistic target conditions were actually perceived as more narcissistic than the non-narcissistic target.

All dependent variable correlations in this study are included in Appendix A – Correlations. All measures and materials used in this study are included in Appendix D – Study 3 Measures.

Narcissistic admiration and rivalry

After completing the NPI, participants completed an 18-item measure of narcissistic admiration and rivalry (NARQ; Back et al., 2013). The NARQ contains subscales measuring narcissistic admiration and narcissistic rivalry. Each subscale contains three facets. The narcissistic admiration scale contains the facets: grandiosity (e.g., “I will someday be famous”), uniqueness (e.g., “I show others how special I am”), and charmingness (e.g., “Most of the time, I am able to draw people’s attention to myself in conversations”). The narcissistic rivalry scale contains the facets: devaluation (e.g., “Other people are worth nothing”), supremacy (e.g., “I want my rivals to fail”), and aggressiveness (e.g., “I often get annoyed when I am criticized”). Each item was rated on a 6-point scale ranging from 1 (*Not agree at all*) to 6 (*Agree completely*). A single index of grandiose narcissism was computed by summing all the items together (Admiration subscale: $\alpha = .91$; $M = 30.14$; $SD = 11.45$; Rivalry subscale: $\alpha = .93$; $M = 24.75$; $SD = 12.56$; overall NARQ: $\alpha = .95$; $M = 54.89$; $SD = 22.16$). Results including the NARQ consist of the admiration and rivalry subscales combined into a total score representing grandiose narcissism; the admiration and rivalry subscales of the NARQ showed the same pattern of results when analyzed separately.²

Interview audio clips and conditions

Participants were then randomly assigned through the Qualtrics survey platform to listen to audio interview clips of either a male or female target, described as a past participant named Jesse (who was portrayed by a male and female confederate following the same script). The target’s name was changed from previous studies to a more gender-neutral name so it could be applied to both the male and female target. The same cover story and interview questions from

² Any differences in results between the admiration and rivalry subscales of the NARQ will be indicated in footnotes.

Studies 1 and 2 were used in Study 3, but the target conditions and target interview answers were different. As in previous studies, the interview questions were listed on the computer screen for participants to read (i.e., ‘How would you describe your leadership ability?’) followed by an audio clip of the target’s response. Conditions differed in target gender and on the target’s level of narcissism. Depending on the condition participants were assigned to, they either heard the antagonistically-narcissistic responses (e.g., “I am great. It isn’t whether or not I get along with them; it is whether they can get along with me.”), the non-antagonistically-narcissistic responses (e.g., “I am great. I don’t see why not.”), or the non-narcissistic responses (e.g., “I try to be pretty friendly. There’s no sense in being difficult for no reason.”). The target’s interview answers were largely adapted from Burton et al. (2017) as in Studies 1 and 2, with additional modified grandiose narcissism interview responses modeled after items from the Narcissistic Personality Inventory (Raskin & Terry, 1988) and the Five Factor Narcissism Inventory (Glover, Miller, Lynam, Crego, & Widiger, 2012), and rivalry aspects modeled after the Narcissistic Admiration and Rivalry Questionnaire (NARCQ; Back et al., 2013).

Target Narcissism Manipulation Check

After completing the deservingness and attribution measures, participants rated the target, Jesse, on 14 narcissistic traits (i.e., arrogant, exploitative, pompous), adapted from Burton et al. (2017). Each trait was rated on a 10-point scale ranging from 1 (*Not at all*) to 10 (*Extremely*). A single index of target narcissism was computed by averaging all the items ($\alpha = .96$; $M = 129.94$; $SD = 31.62$).

Results

Similar to Study 1, we examined the association between participants’ trait narcissism (separately for the NPI and NARQ), condition, and the outcome variables using a series of multiple regression analyses (one for each outcome). In Step 1 of each regression, we entered

participants' trait narcissism (measured using the NPI or NARQ, mean-centered). In Step 2, we added dummy-coded variables representing target narcissism conditions using the low-narcissistic target condition as the reference group, where: dummy code 1 (D1) compared the non-antagonistically-narcissistic target condition to the low-narcissistic target condition, and coded for the low-narcissistic target (0), non-antagonistically-narcissistic target (1), and antagonistically-narcissistic target (0); and dummy code 2 (D2) compared the antagonistically-narcissistic target condition to the low-narcissistic target condition, and coded for the low-narcissistic target (0), non-antagonistically-narcissistic target (0), and antagonistically-narcissistic target (1). In Step 3, we entered the interaction terms between participants' trait narcissism and condition (NPI x dummy code 1, NPI x dummy code 2).

We also tested whether participant or target gender moderated any of the results. We did so in two ways. For the first method, we added target gender (female = 0; male = 1) and all of its interactions with participant narcissism and condition to our main analyses. For the second method, we created a new variable representing whether participant gender matched target gender (match = 0; mismatch = 1). We included participant gender in these analyses (female = 0; male = 1), all two-way interaction terms, and three-way interactions between participant narcissism, participant gender and condition, as well as participant narcissism, the gender match variable, and condition. These analyses revealed no significant main effects or interactions of target gender or the match between participant gender and target gender (similar to Hepper et al., 2014), so this variable was excluded from the reported analysis.

Target Narcissism Manipulation Check

To test whether the non-antagonistically- and antagonistically-narcissistic target conditions were perceived as more narcissistic than the non-narcissistic target condition, a one-way ANOVA was conducted. Participants' ratings of target narcissism were used as the

dependent variable, and target narcissism condition (i.e., non-narcissistic target condition, non-antagonistically-narcissistic target condition, or antagonistically-narcissistic target condition) was used as the factor. The results showed that there was a significant difference between conditions as determined by the one-way ANOVA ($F(2, 642) = 135.68, p = .001$). A Tukey post hoc test revealed that participants' target narcissism ratings were significantly higher in the non-antagonistically-narcissistic target condition ($140.11 \pm 23.87, p = .001$) and the antagonistically-narcissistic target condition ($143.96 \pm 25.23, p = .001$) compared to the non-narcissistic target condition (105.77 ± 30.08). There was no significant difference between participants' target narcissism ratings in the non-antagonistically- and antagonistically-narcissistic target conditions ($p = .29$).

Perceived Similarity (as a Function of NPI and Target Narcissism)

To test the hypothesis that highly narcissistic participants will perceive more similarity toward a target person who appears to be non-antagonistically- or antagonistically-narcissistic than less narcissistic participants, we conducted a regression with interaction terms (see Table 15). The analysis revealed significant main effects for target narcissism such that: Overall, participants perceived more similarity toward the non-narcissistic target than either the non-antagonistically-narcissistic target, $B = -9.83, p = .001$, or the antagonistically-narcissistic target, $B = -9.05, p = .001$. As well, there was a significant interaction (R^2 change = .24, $F(2, 639) = 200.33, p = .001$), such that: Highly narcissistic participants perceived significantly less similarity to the non-narcissistic target than less narcissistic participants, $B = -.37, p = .001$, 95% confidence interval (CI) = $[-.45, -.29]$; and highly narcissistic participants perceived significantly more similarity to the non-antagonistically-narcissistic target, $B = .56, p = .001$, 95% confidence interval (CI) = $[.48, .63]$, and the antagonistically-narcissistic target, $B = .63, p = .001$, 95% confidence interval (CI) = $[.56, .71]$, than less narcissistic participants (see Figure 19).

Table 15

Hierarchical regression of perceived similarity on trait narcissism (using NPI) and experimental condition in Study 3.

Variable	B	SE (B)	β	ΔR^2
Step 1				.11**
NPI	.30	.04	.33**	
Step 2				.29**
NPI	.28	.03	.30**	
D1	-9.83	.64	-.55**	
D2	-9.04	.63	-.52**	
Step 3				.24**
NPI	-.37	.04	-.40**	
D1	-10.06	.50	-.56**	
D2	-9.48	.49	-.54**	
NPI x D1	.93	.06	.57**	
NPI x D2	1.00	.06	.62**	

* $p < 0.05$. ** $p < 0.001$.

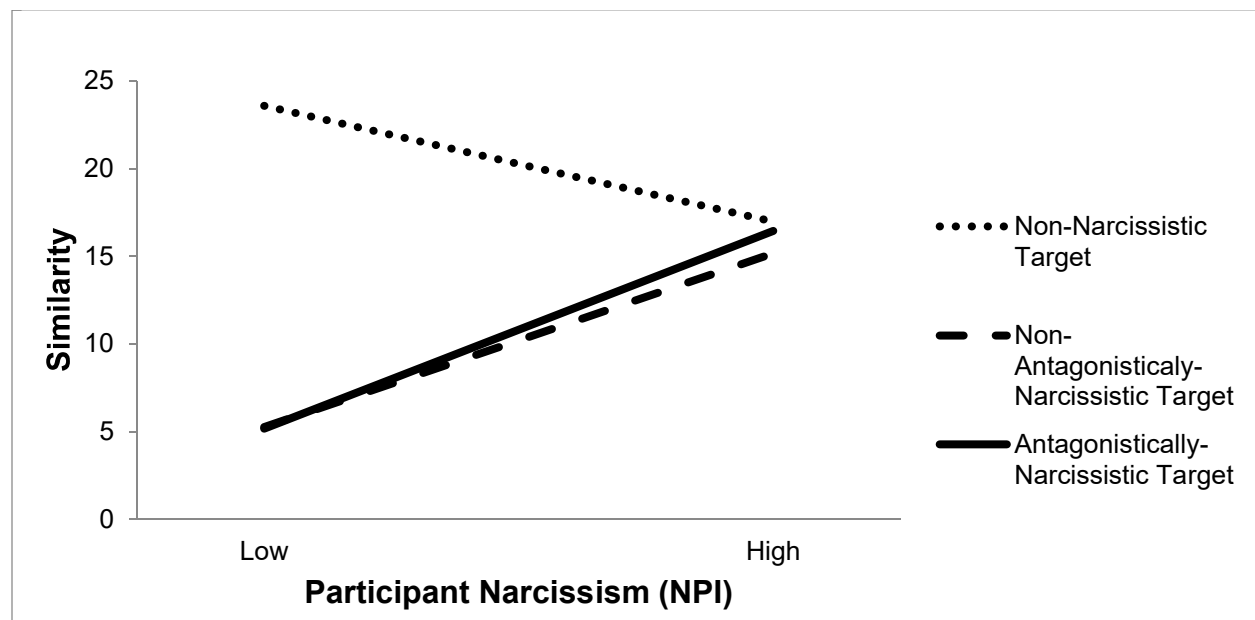


Fig. 19. The interaction of individual trait narcissism and experimental condition on perceived similarity in Study 3.

Perceived Similarity (as a function of NARQ and Target Narcissism)

Parallel analyses were conducted with NARQ scores as the measure of participant narcissism (see Table 16). The analysis revealed significant main effects for target narcissism consistent with results calculated with participant NPI, such that: Overall, participants perceived more similarity toward the non-narcissistic target than either the non-antagonistically-narcissistic target, $B = -9.84, p = .001$, or the highly-narcissistic target, $B = -9.20, p = .001$. As well, there was a significant interaction (R^2 change = .19, $F(2, 639) = 157.75, p = .001$) with patterns consistent with results calculated with participant NPI, such that: Participants high in narcissistic admiration and rivalry perceived significantly less similarity to the non-narcissistic target than less narcissistic participants, $B = -.09, p = .001$, 95% confidence interval (CI) = $[-.12, -.05]$; and high admiration and rivalry narcissistic participants perceived significantly more similarity to the non-antagonistically-narcissistic target, $B = .25, p = .001$, 95% confidence interval (CI) = $[.22, .29]$, and the antagonistically-narcissistic target, $B = .26, p = .001$, 95% confidence interval (CI) = $[.23, .29]$, than less narcissistic participants (see Figure 20).

Table 16

Hierarchical regression of perceived similarity on trait narcissism (using NARQ) and experimental condition in Study 3.

Variable	B	SE (B)	β	ΔR^2
Step 1				.15**
NARQ	.15	.01	.38**	
Step 2				.29**
NARQ	.14	.01	.37**	
D1	-9.84	.61	-.55**	
D2	-9.20	.60	-.52**	
Step 3				.19**
NARQ	-.09	.02	-.23**	
D1	-9.84	.50	-.55**	
D2	-9.50	.49	-.54**	
NARQ x D1	.34	.02	.49**	
NARQ x D2	.35	.02	.54**	

* $p < 0.05$. ** $p < 0.001$.

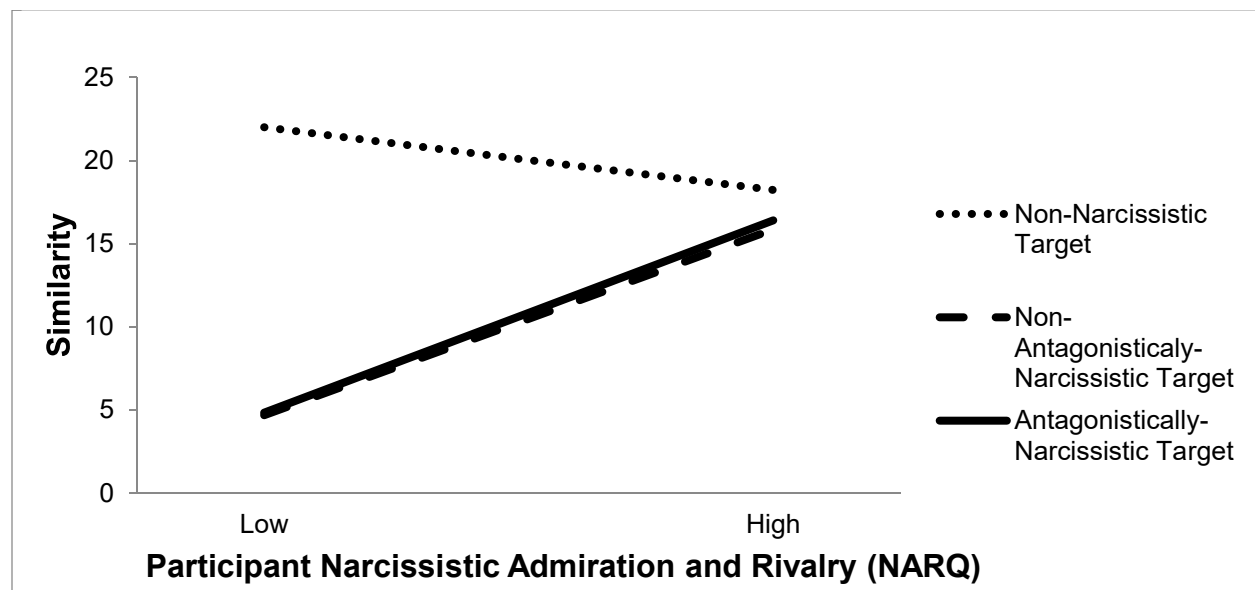


Fig. 20. The interaction of individual narcissistic admiration and rivalry and experimental condition on perceived similarity in Study 3.

Liking (as a Function of NPI and Target Narcissism)

To test the hypothesis that highly narcissistic participants will like a target person who appears to be non-antagonistically- or antagonistically-narcissistic more than less narcissistic participants, we conducted a regression with interaction terms (see Table 17). The analysis revealed significant main effects for target narcissism such that: Overall, participants liked the non-narcissistic target more than either the non-antagonistically-narcissistic target, $B = -28.21, p = .001$, or the antagonistically-narcissistic target, $B = -27.60, p = .001$. As well, there was a significant interaction (R^2 change = .14, $F(2, 639) = 119.53, p = .001$) such that: Highly narcissistic participants liked the non-narcissistic target significantly less than less narcissistic participants, $B = -.45, p = .001$, 95% confidence interval (CI) = [-.65, -.26]; and highly narcissistic participants liked the non-antagonistically-narcissistic target, $B = 1.26, p = .001$, 95% confidence interval (CI) = [1.06, 1.45], and the antagonistically-narcissistic target, $B = 1.60, p = .001$, 95% confidence interval (CI) = [1.41, 1.80], significantly more than less narcissistic participants (see Figure 21).

Table 17

Hierarchical regression of liking on trait narcissism (using NPI) and experimental condition in Study 3.

Variable	B	SE (B)	B	ΔR^2
Step 1				.13**
NPI	.89	.09	.37**	
Step 2				.37**
NPI	.81	.07	.33**	
D1	-28.21	1.50	-.61**	
D2	-27.60	1.47	-.61**	
Step 3				.14**
NPI	-.45	.10	-.19**	
D1	-28.72	1.28	-.62**	
D2	-28.44	1.26	-.62**	
NPI x D1	1.71	.14	.41**	
NPI x D2	2.06	.14	.49**	

* $p < 0.05$. ** $p < 0.001$.

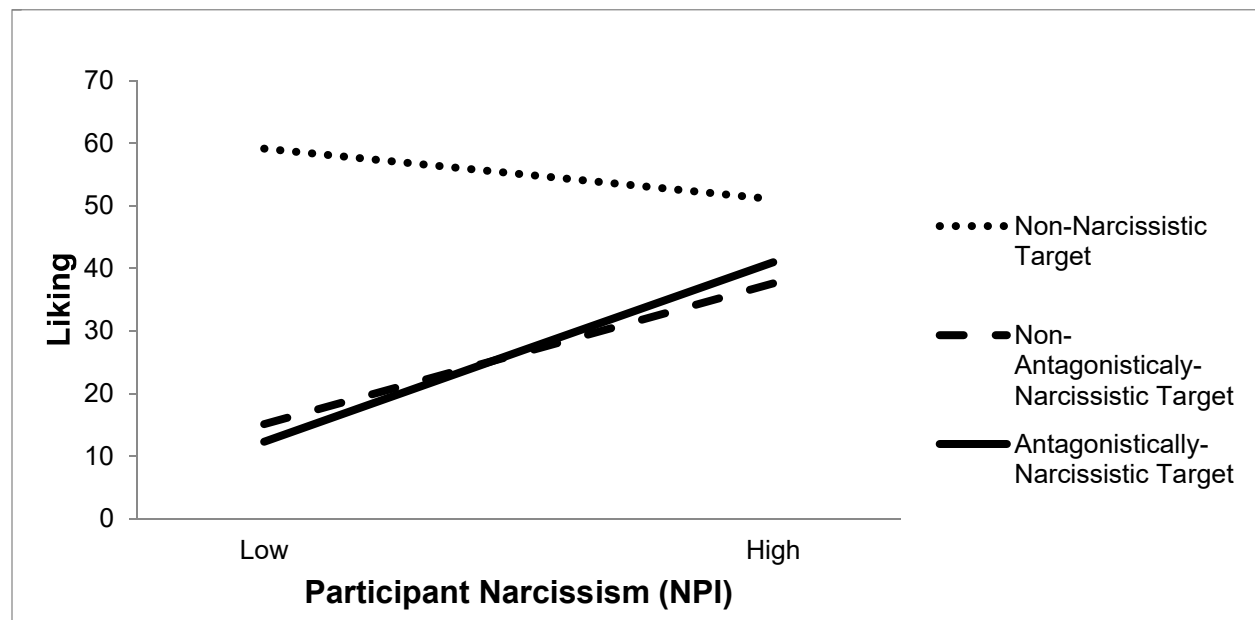


Fig. 21. The interaction of individual trait narcissism and experimental condition on liking of the target in Study 3.

Liking (as a Function of NARQ and Target Narcissism)

Parallel analyses were conducted with NARQ scores as the measure of participant narcissism (see Table 18). The analysis revealed significant main effects for target narcissism consistent with results calculated with participant NPI, such that: Overall, participants liked the non-narcissistic target more than either the non-antagonistically-narcissistic target, $B = -28.23, p = .001$, or the antagonistically-narcissistic target, $B = -28.05, p = .001$. As well, there was a significant interaction (R^2 change = .15, $F(2, 639) = 155.92, p = .001$) consistent with results calculated with participant NPI, such that: Participants high on narcissistic admiration and rivalry liked the non-narcissistic target significantly less than participants low on narcissistic admiration and rivalry, $B = -.11, p = .002$, 95% confidence interval (CI) = $[-.18, -.04]^3$; and participants high on narcissistic admiration and rivalry liked the non-antagonistically-narcissistic target, $B = .64, p = .001$, 95% confidence interval (CI) = $[.56, .71]$, and the antagonistically-narcissistic target, $B = .70, p = .001$, 95% confidence interval (CI) = $[.63, .77]$, significantly more than participants low on narcissistic admiration and rivalry (see Figure 22).

³ For narcissistic admiration and rivalry calculated separately, participants' narcissistic admiration did not affect liking of the non-narcissistic target, $B = -.10, p = .18$, 95% confidence interval (CI) = $[-.25, .05]$; but participants high on narcissistic rivalry liked the non-narcissistic target significantly less than participants low on narcissistic rivalry, $B = -.27, p = .001$, 95% confidence interval (CI) = $[-.39, -.13]$.

Table 18

Hierarchical regression of liking on trait narcissism (using NARQ) and experimental condition in Study 3.

Variable	B	SE (B)	B	ΔR^2
Step 1				.18**
NARQ	.42	.04	.43**	
Step 2				.37**
NARQ	.40	.03	.41**	
D1	-28.23	1.42	-.61**	
D2	-28.05	1.39	-.62**	
Step 3				.15**
NARQ	-.11	.04	-.12*	
D1	-28.28	1.16	-.61**	
D2	-28.75	1.14	-.63**	
NARQ x D1	.75	.05	.42**	
NARQ x D2	.81	.05	.49**	

* $p < 0.05$. ** $p < 0.001$.

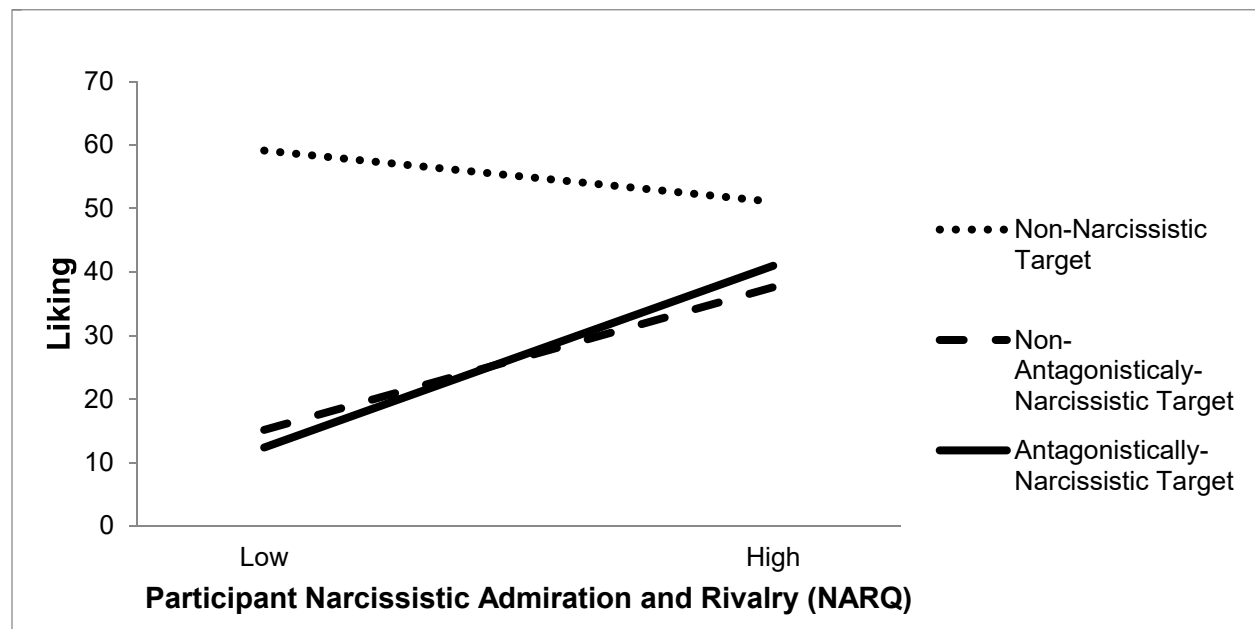


Fig. 22. The interaction of individual narcissistic admiration and rivalry and condition on liking of the target in Study 3.

Expected Liking from the Target (as a Function of NPI and Target Narcissism)

To test the hypothesis that highly narcissistic participants will expect to be liked more by a target person who appears to be non-antagonistically- or antagonistically-narcissistic than less narcissistic participants, we conducted a regression with interaction terms (see Table 19). The analysis revealed significant main effects for target narcissism such that: Overall, participants expected the non-narcissistic target to like them more than either the non-antagonistically-narcissistic target, $B = 10.01, p = .001$, or the antagonistically-narcissistic target, $B = -8.76, p = .001$. As well, there was a significant interaction (R^2 change = .07, $F(2, 639) = 36.71, p = .001$), such that: Highly narcissistic participants expected significantly more liking from the non-antagonistically-narcissistic target, $B = .56, p = .001$, 95% confidence interval (CI) = [.43, .69], and the antagonistically-narcissistic target, $B = .79, p = .001$, 95% confidence interval (CI) = [.66, .92], than less narcissistic participants (see Figure 23). There was no significant relation between participant narcissism and expected liking from the low-narcissistic target, $B = .004, p = .95$, 95% confidence interval (CI) = [-.13, .14] (see Figure 23).

Table 19

Hierarchical regression of expected liking from the target on trait narcissism (using NPI) and experimental condition in Study 3.

Variable	B	SE (B)	β	ΔR^2
Step 1				.15**
NPI	.48	.05	.39**	
Step 2				.16**
NPI	.45	.04	.37**	
D1	-10.01	.89	-.42**	
D2	-8.76	.87	-.38**	
Step 3				.07**
NPI	.004	.07	.003	
D1	-10.23	.85	-.43**	
D2	-9.06	.83	-.39**	
NPI x D1	.55	.09	.26**	
NPI x D2	.79	.09	.37**	

* $p < 0.05$. ** $p < 0.001$.

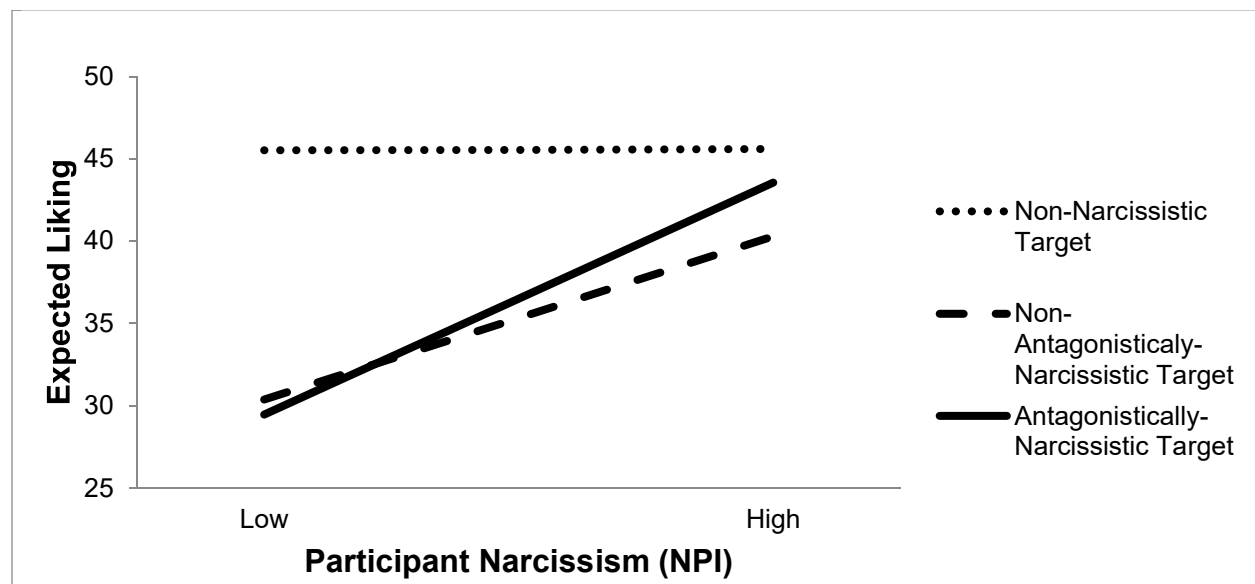


Fig. 23 The interaction of individual trait narcissism and experimental condition on expected liking from the target in Study 3.

Expected Liking from the Target (as a Function of NARQ and Target Narcissism)

Parallel analyses were conducted with NARQ scores as the measure of participant narcissism (see Table 20). The analysis revealed significant main effects for target narcissism consistent with results calculated with participant NPI, such that: Overall, participants expected the non-narcissistic target to like them more than either the non-antagonistically-narcissistic target, $B = -9.92, p = .001$, or the antagonistically-narcissistic target, $-9.00, p = .001$. As well, there was a significant interaction (R^2 change = .08, $F(2, 639) = 56.89, p = .001$) such that: Participants high on narcissistic admiration and rivalry expected significantly more liking from the non-narcissistic target, $B = .06, p = .006$, 95% confidence interval (CI) = [.02, .11]⁴ (inconsistent with results calculated using participant NPI), the non-antagonistically-narcissistic target, $B = .34, p = .001$, 95% confidence interval (CI) = [.29, .39] (consistent with results calculated using participant NPI); and the antagonistically-narcissistic target, $B = .38, p = .001$, 95% confidence interval (CI) = [.34, .43] (consistent with results calculated using participant NPI), than participants low on narcissistic admiration and rivalry (see Figure 24).

⁴ For narcissistic admiration and rivalry calculated separately, participants high on narcissistic admiration expected significantly more liking from the non-narcissistic target than participants low on narcissistic admiration, $B = .15, p = .001$, 95% confidence interval (CI) = [.06, .24]; but participants' narcissistic rivalry did not affect expected liking from the non-narcissistic target, $\beta = .07, p = .09$, 95% confidence interval (CI) = [-.01, .16].

Table 20

Hierarchical regression of expected liking from the target on trait narcissism (using NARQ) and experimental condition in Study 3.

Variable	B	SE (B)	β	ΔR^2
Step 1				.29**
NARQ	.27	.02	.53**	
Step 2				.17**
NARQ	.26	.02	.52**	
D1	-9.92	.80	-.42**	
D2	-9.00	.78	-.39**	
Step 3				.08**
NARQ	.06	.02	.127	
D1	-9.96	.74	-.42**	
D2	-9.27	.72	-.40**	
NARQ x D1	.28	.03	.31**	
NARQ x D2	.32	.03	.38**	

* $p < 0.05$. ** $p < 0.001$.

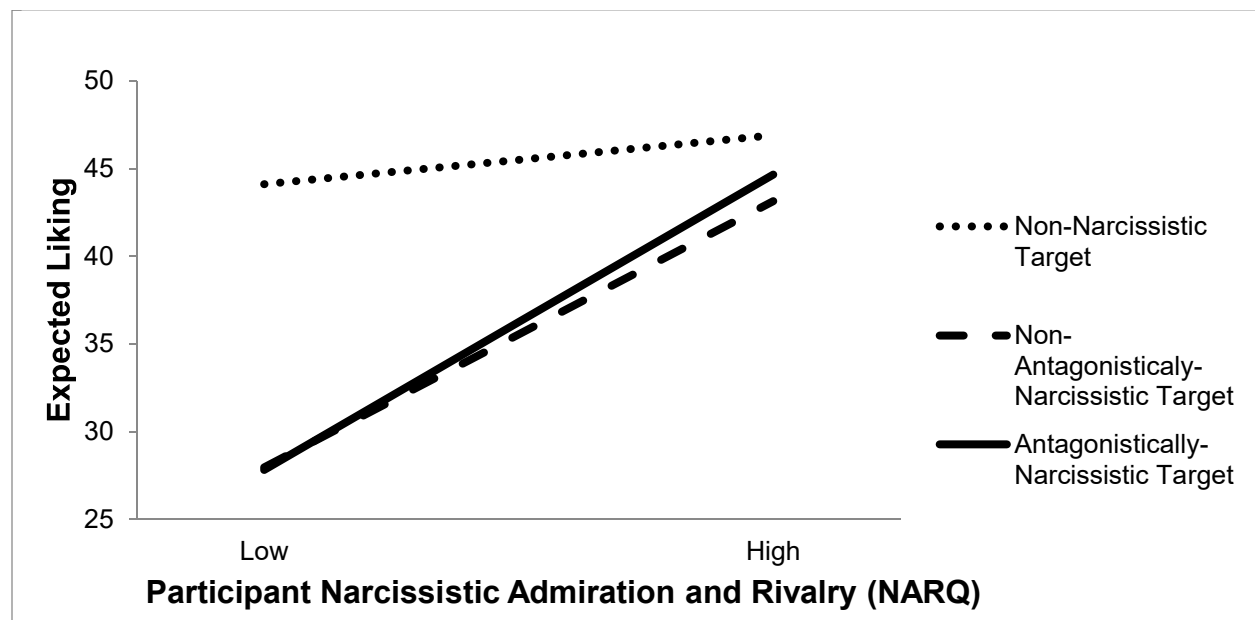


Fig. 24 The interaction of individual narcissistic admiration and rivalry and condition on expected liking in Study 3.

Empathy (as a Function of NPI and Target Narcissism)

To test the hypothesis that highly narcissistic participants will feel more empathy toward a target person who appears to be non-antagonistically- and antagonistically-narcissistic than less narcissistic participants, we conducted a regression with interaction terms (see Table 21).

Consistent with Study 1b, the analysis revealed significant main effects for target narcissism such that: Overall, participants empathized more with the non-narcissistic target than either the non-antagonistically-narcissistic target, $B = -5.26, p = .001$, or the antagonistically-narcissistic target, $B = -4.59, p = .001$. As well, there was a significant interaction (R^2 change = .03, $F(2, 639) = 11.57, p = .001$) such that: Highly narcissistic participants felt less empathy toward the non-narcissistic target, $B = -.17, p = .01$, 95% confidence interval (CI) = $[-.29, -.05]$; more empathy toward the non-antagonistically-narcissistic target, $B = .21, p = .001$, 95% confidence interval (CI) = $[.09, .33]$; and more empathy toward the antagonistically-narcissistic target, $B = .17, p = .005$, 95% confidence interval (CI) = $[.05, .29]$, compared to less narcissistic participants (see Figure 25).

Table 21

Hierarchical regression of empathy toward the target on trait narcissism (using NPI) and experimental condition in Study 3.

Variable	B	SE (B)	β	ΔR^2
Step 1				.01*
NPI	.08	.04	.09*	
Step 2				.08**
NPI	.07	.04	.07	
D1	-5.26	.79	-.29**	
D2	-4.59	.78	-.26**	
Step 3				.03**
NPI	-.17	.06	-.18*	
D1	-5.32	.78	-.29**	
D2	-4.75	.77	-.27**	
NPI x D1	.38	.09	.23**	
NPI x D2	.34	.09	.21**	

* $p < 0.05$. ** $p < 0.001$.

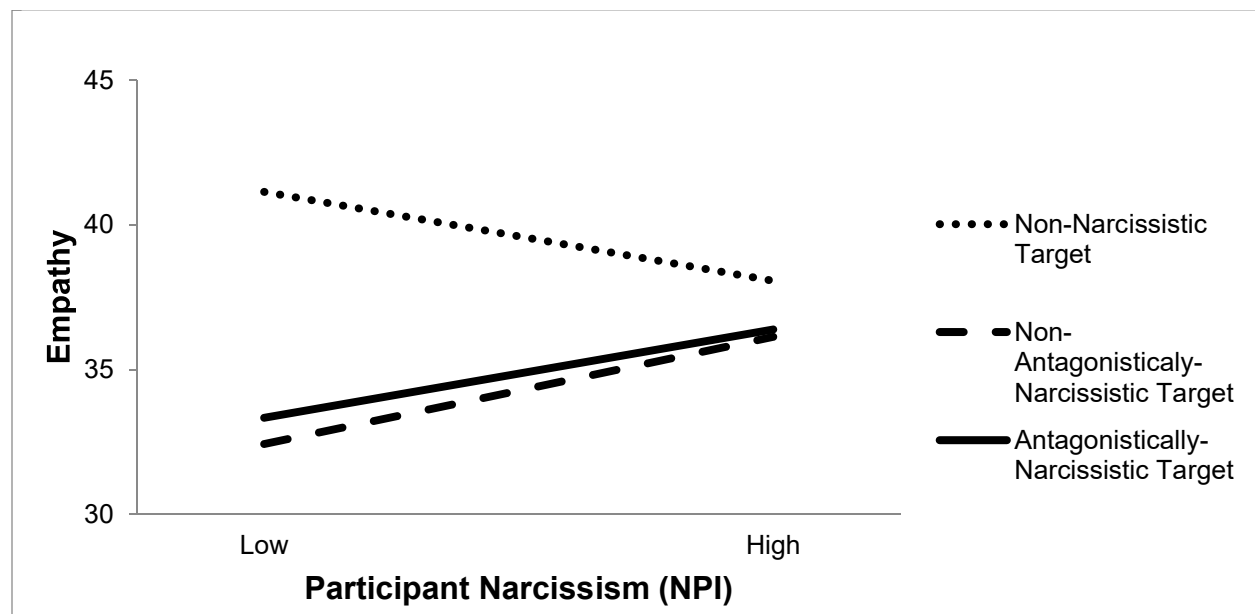


Fig. 25. The interaction of individual trait narcissism and experimental condition on empathy toward the target in Study 3.

Empathy (as a Function of NARQ and Target Narcissism)

Parallel analyses were conducted with NARQ scores as the measure of participant narcissism (see Table 22). The analysis revealed significant main effects for target narcissism consistent with results calculated using participant NPI, such that: Overall, participants high on narcissistic admiration and rivalry empathized more with the non-narcissistic target than either the non-antagonistically-narcissistic target, $B = -5.22, p = .001$, or the antagonistically-narcissistic target, $B = -4.62, p = .001$. As well, there was a significant interaction (R^2 change = .03, $F(2, 639) = 10.09, p = .001$) such that: Participants high on narcissistic admiration and rivalry felt significantly more empathy toward the non-antagonistically-narcissistic target, $B = .10, p = .001$, 95% confidence interval (CI) = [.05, .15]; and the antagonistically-narcissistic target, $B = .09, p = .001$, 95% confidence interval (CI) = [-.04, .14], compared to participants low on narcissistic admiration and rivalry (see Figure 25). There was no significant relation between participant narcissistic admiration and rivalry and empathy toward the non-narcissistic target, $B = -.04, p = .11$, 95% confidence interval (CI) = [-.09, .01]⁵ (see Figure 26).

⁵ For narcissistic admiration and rivalry calculated separately, participants' narcissistic admiration did not affect empathy toward the non-narcissistic target, $B = -.02, p = .61$, 95% confidence interval (CI) = [-.11, .07]; but participants high on narcissistic rivalry felt significantly less empathy toward the non-narcissistic target than participants low on narcissistic rivalry, $B = -.10, p = .02$, 95% confidence interval (CI) = [-.19, -.02].

Table 22

Hierarchical regression of empathy toward the target on trait narcissism (using NARQ) and experimental condition in Study 3.

Variable	B	SE (B)	β	ΔR^2
Step 1				.02*
NARQ	.05	.02	.14**	
Step 2				.08**
NARQ	.05	.01	.13*	
D1	-5.22	.79	-.29**	
D2	-4.62	.77	-.26**	
Step 3				.03**
NARQ	-.04	.02	-.10	
D1	-5.21	.78	-.29**	
D2	-4.73	.76	-.27**	
NARQ x D1	.14	.04	.20**	
NARQ x D2	.13	.03	.20**	

* $p < 0.05$. ** $p < 0.001$.

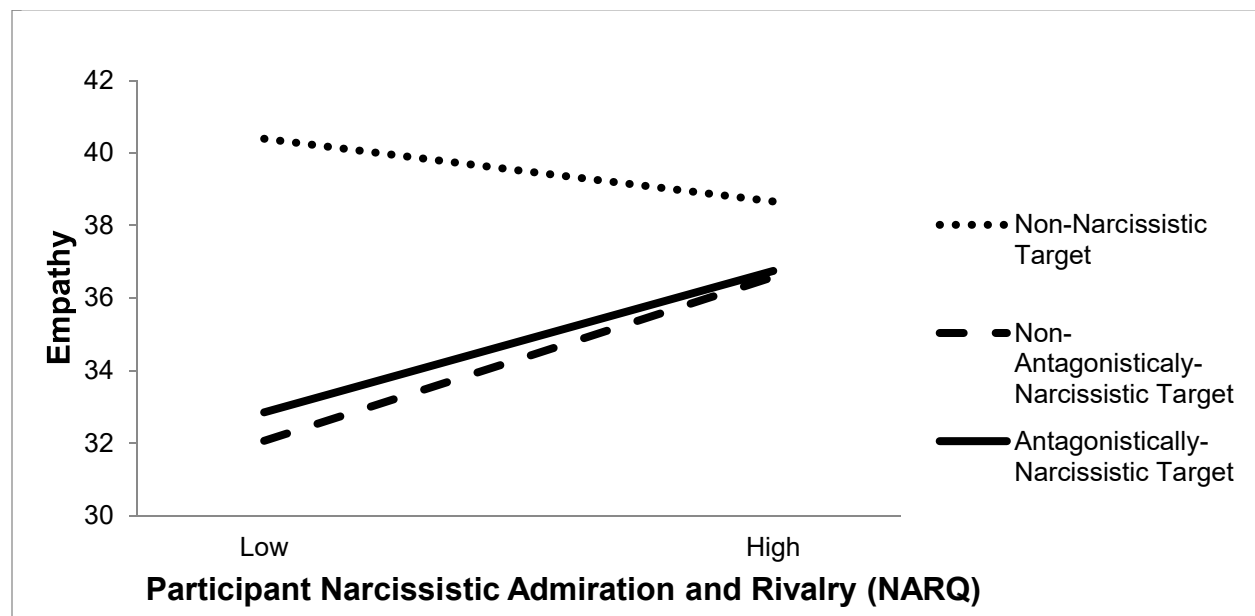
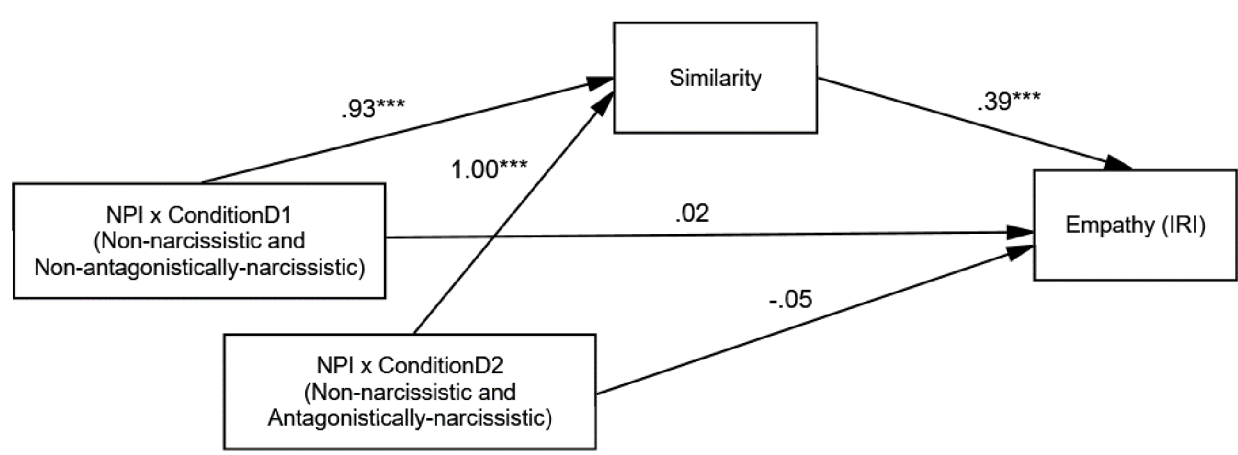


Fig. 26. The interaction of individual trait narcissism and experimental condition on empathy toward the target in Study 3.

Mediation Analysis (Perceived Similarity, NPI and Target Narcissism)

To test the hypothesis that the effect of participant and target narcissism on empathy will be mediated by perceived similarity, the same program and procedure was used as Studies 1 and 2. The same dummy coding was used as the regression analysis reported above. The two independent variables were: the cross-product interaction terms for participant NPI and target narcissism condition. We included participant NPI and the dummy coded condition variables (as covariates). The significance of the indirect effect was tested using bootstrapping procedures on 1,000 bootstrapped samples.

Paths for both interaction terms on perceived similarity and similarity on empathy were significant (see Figure 27). There were significant indirect effects of both interaction terms on empathy through similarity, such that: in the non-narcissistic target condition similarity negatively mediated the relationship, the bootstrapped unstandardized indirect effect was -.15, 95% CI [-.20, -.09]; in the non-antagonistically-narcissistic target condition, similarity positively mediated the relationship, the bootstrapped unstandardized indirect effect was .22, 95% CI [.15, .29]; and in the antagonistically-narcissistic target condition similarity positively mediated the relationship, the bootstrapped unstandardized indirect effect was .25, 95% CI [.16, .33] (see Figure 27).

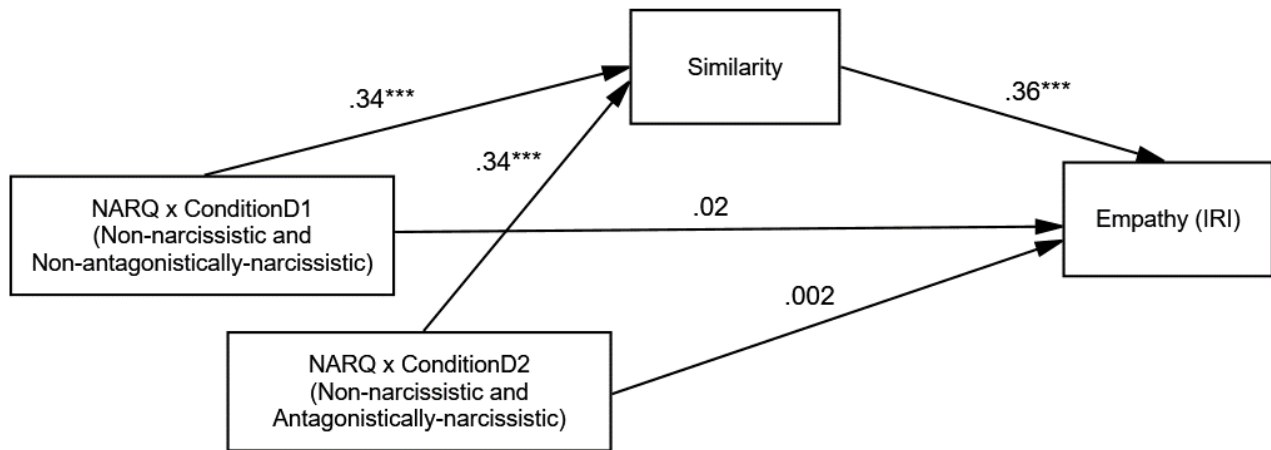


Note. *** $p < .001$; ** $p < .01$; * $p < .05$

Fig. 27. Path model with unstandardized regression weights in Study 3. Note. *** $p < .001$; ** $p < .01$; * $p < .05$.

Mediation Analysis (Perceived Similarity, NARQ and Target Narcissism)

Parallel analyses were conducted with NARQ scores as the measure of participant narcissism. Consistent with results calculated using participant NPI, paths for both interaction terms on perceived similarity and perceived similarity on empathy were significant (see Figure 28). There were significant indirect effects of both interaction terms on empathy through similarity consistent with results calculated using participant NPI, such that: in the non-narcissistic target condition similarity negatively mediated the relationship, the bootstrapped unstandardized indirect effect was $-.03$, 95% CI $[-.05, -.02]$; in the non-antagonistically-narcissistic target condition, similarity positively mediated the relationship, the bootstrapped unstandardized indirect effect was $.09$, 95% CI $[.06, .13]$; and in the antagonistically-narcissistic target condition, similarity positively mediated the relationship, the bootstrapped unstandardized indirect effect was $.10$, 95% CI $[.06, .13]$ (see Figure 28).



Note. *** $p < .001$; ** $p < .01$; * $p < .05$

Fig. 28. Path model with unstandardized regression weights in Study 3. Note. *** $p < .001$; ** $p < .01$; * $p < .05$.

Deservingness (as a Function of NPI and Target Narcissism)

To test the hypotheses that highly narcissistic participants, in comparison to less narcissistic participants, will perceive that the non-antagonistically- and antagonistically-narcissistic targets deserved fewer negative outcomes, we conducted a regression with interaction terms (see Table 23). The analysis revealed a significant main effect for target narcissism such that: Overall, participants perceived the non-narcissistic target to be less deserving of bad outcomes than the non-antagonistically-narcissistic target, $B = 9.03$, $p = .001$, and the antagonistically-narcissistic target, $B = 12.07$, $p = .001$. As well, there was a significant interaction (R^2 change = .04, $F(2, 639) = 13.91$, $p = .001$) such that: Highly narcissistic participants perceived the non-narcissistic target to be significantly more deserving of bad outcomes, $B = 1.04$, $p = .001$, 95% confidence interval (CI) = [.81, 1.269], and the non-antagonistically-narcissistic target as significantly more deserving of bad outcomes, $B = .46$, $p = .001$, 95% confidence interval (CI) = [.24, .69], than did less narcissistic participants (see Figure 29). There was no significant relation between participant narcissism and perceived

deservingness of bad outcomes for the antagonistically-narcissistic target, $B = .19$, $p = .10$, 95% confidence interval (CI) = $[-.04, .42]$ (see Figure 29).

Table 23

Hierarchical regression of deservingness toward the target on trait narcissism (using NPI) and experimental condition in Study 3.

Variable	B	SE (B)	β	ΔR^2
Step 1				.08**
NPI	.54	.07	.28**	
Step 2				.09**
NPI	.56	.07	.30**	
D1	9.03	1.51	.25**	
D2	12.07	1.48	.34**	
Step 3				.04**
NPI	1.04	.12	.55**	
D1	9.28	1.48	.26**	
D2	12.38	1.46	.35**	
NPI x D1	-.58	.17	-.18**	
NPI x D2	-.85	.16	-.26**	

* $p < 0.05$. ** $p < 0.001$.

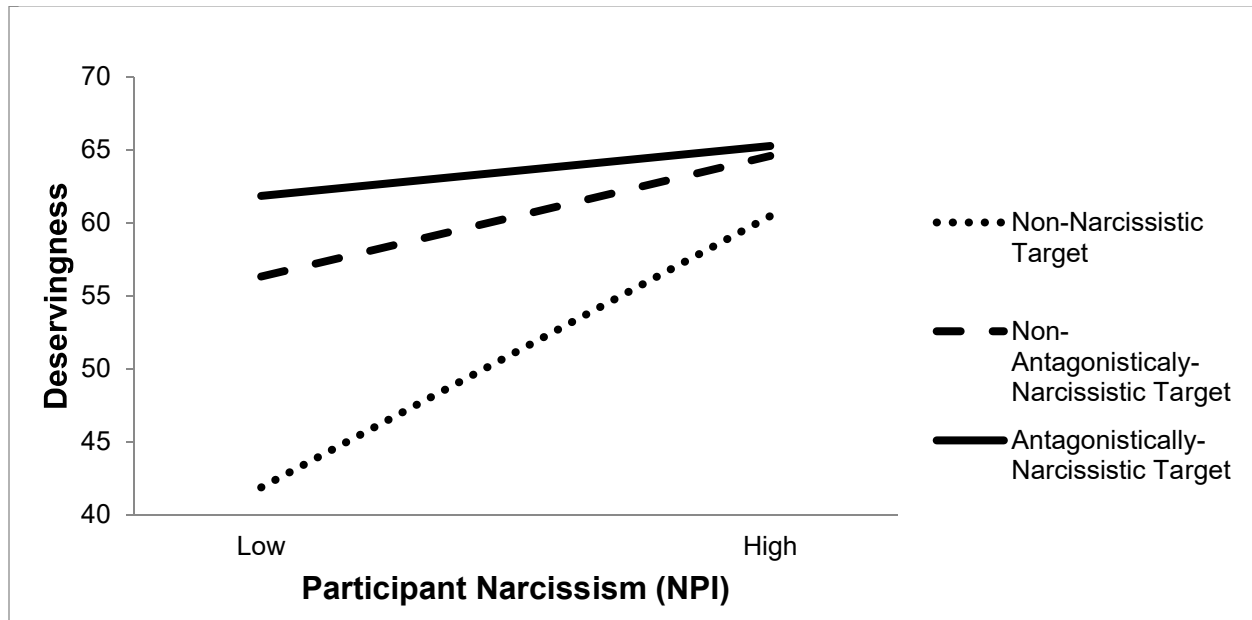


Fig. 29. The interaction of individual trait narcissism and experimental condition on deservingness toward the target in Study 3.

Deservingness (as a Function of NARQ and Target Narcissism)

Parallel analyses were conducted with NARQ scores as the measure of participant narcissism (see Table 24). The analysis revealed a significant main effect for target narcissism consistent with the results calculated using participant NPI, such that: Overall, participants perceived the non-narcissistic target to be less deserving of bad outcomes than the non-antagonistically-narcissistic target, $B = 9.25, p = .001$, and the antagonistically-narcissistic target, $B = 11.77, p = .001$. As well, there was a significant interaction (R^2 change = .03, $F(2, 639) = 13.45, p = .001$) such that: Participants high on narcissistic admiration and rivalry perceived the non-narcissistic target to be significantly more deserving of bad outcomes, $B = .54, p = .001$, 95% confidence interval (CI) = [.45, .62], as well as the non-antagonistically-narcissistic target, $B = .31, p = .001$, 95% confidence interval (CI) = [.23, .40], and the antagonistically-narcissistic target, $B = .24, p = .0001$, 95% confidence interval (CI) = [.16, .33], than did participants low on narcissistic admiration and rivalry (see Figure 30).

Table 24

Hierarchical regression of deservingness toward the target on trait narcissism (using NARQ) and experimental condition in Study 3.

Variable	B	SE (B)	β	ΔR^2
Step 1				.22**
NARQ	.36	.03	.47**	
Step 2				.09**
NARQ	.36	.03	.48**	
D1	9.25	1.38	.25**	
D2	11.77	1.35	.33**	
Step 3				.03**
NARQ	.54	.04	.70**	
D1	9.31	1.35	.26**	
D2	12.02	1.32	.34**	
NARQ x D1	-.23	.06	-.16**	
NARQx D2	-.29	.06	-.23**	

* $p < 0.05$. ** $p < 0.001$.

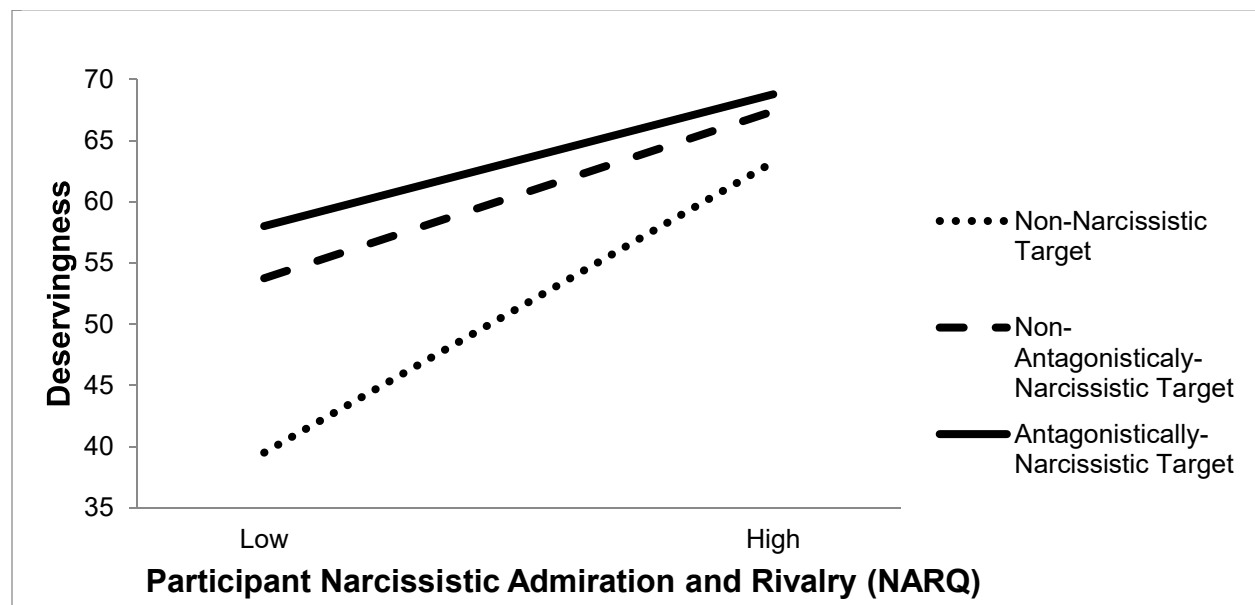


Fig. 30. The interaction of narcissistic admiration and rivalry and condition on deservingness toward the target in Study 3.

Attribution (as a Function of NPI and Target Narcissism)

To test the hypotheses that highly narcissistic participants, in comparison to less narcissistic participants, will attribute less blame and responsibility for the breakup to the non-antagonistically- and antagonistically-narcissistic targets, we conducted a regression with interaction terms to analyze participants' attribution of blame for the breakup to the target, Jesse (see Table 25). This analysis revealed significant main effects for target narcissism such that: Overall, participants attributed less blame to Jesse for the breakup when Jesse was portrayed as a non-narcissistic target compared to a non-antagonistically-narcissistic target, $B = 1.02, p = .001$, or an antagonistically-narcissistic target, $B = 1.09, p = .001$. There was a significant interaction (R^2 change = .03, $F(2, 639) = 9.80, p = .001$) such that: Highly narcissistic participants significantly more blame toward Jesse for the breakup when Jesse was portrayed as a non-narcissistic target, $B = .05, p = .001$, 95% confidence interval (CI) = [.03, .07] than did less narcissistic participants. There were no significant associations of participant narcissism and the attribution of blame to Jesse for the breakup when Jesse was portrayed as a non-antagonistically-narcissistic target, $B = .01, p = .35$, 95% confidence interval (CI) = [-.01, .03]; or as an antagonistically-narcissistic target, $B = -.02, p = .13$, 95% confidence interval (CI) = [-.04, .01] (see Figure 31).

Table 25

Hierarchical regression of the breakup attributed as Jesse's fault on trait narcissism (using NPI) and experimental condition in Study 3.

Variable	B	SE (B)	β	ΔR^2
Step 1				.01
NPI	.01	.01	.07	
Step 2				.11**
NPI	.02	.01	.09*	
D1	1.02	.14	.31**	
D2	1.09	.14	.34**	
Step 3				.03**
NPI	.05	.01	.30**	
D1	1.04	.14	.32**	
D2	1.11	.13	.35**	
NPI x D1	-.04	.02	-.14*	
NPI x D2	-.07	.02	-.23**	

* $p < 0.05$. ** $p < 0.001$.

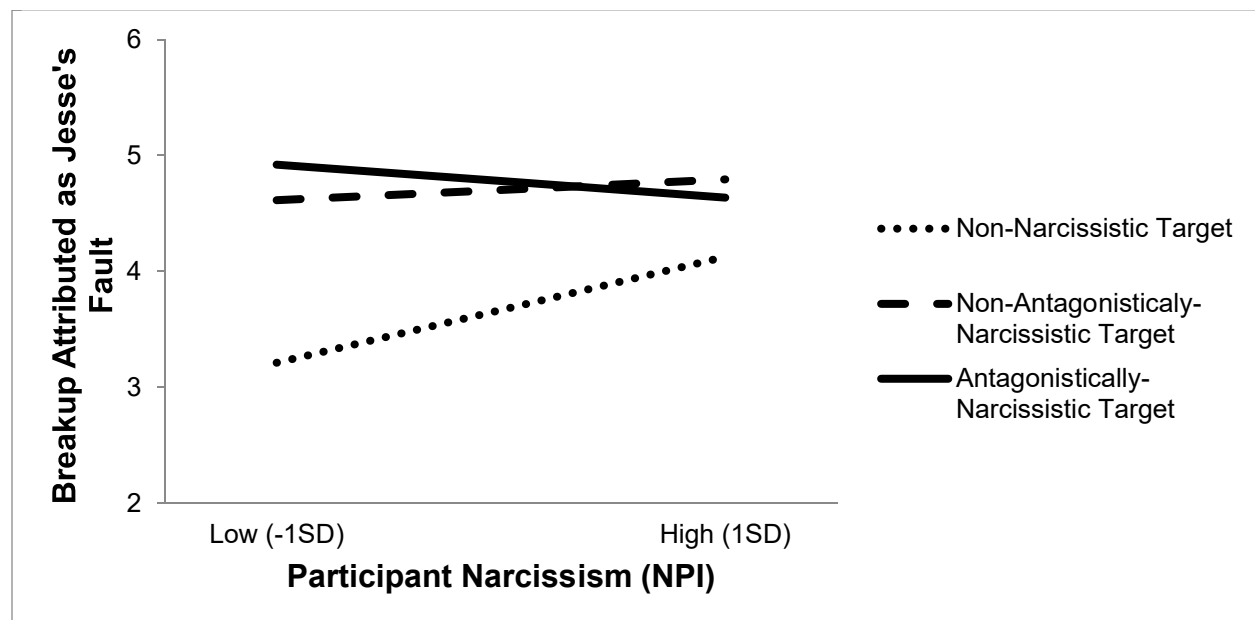


Fig. 31. The interaction of individual trait narcissism and condition on the breakup attributed as Jesse's fault in Study 3.

Attribution (as a Function of NARQ and Target Narcissism)

Parallel analyses were conducted with NARQ scores as the measure of participant narcissism (see Table 26). This analysis revealed significant main effects for target narcissism consistent with results calculated using participant NPI, such that: Overall, participants attributed less blame to Jesse for the breakup when Jesse was portrayed as a non-narcissistic target compared to a non-antagonistically-narcissistic target, $B = 1.04, p = .001$, or a antagonistically-narcissistic target, $B = 1.08, p = .001$. Consistent with results calculated using participant NPI, there was a significant interaction (R^2 change = .03, $F(2, 639) = 9.61, p = .001$ such that: Participants high on narcissistic admiration and rivalry attributed significantly more blame toward Jesse for the breakup when Jesse was portrayed as a non-narcissistic target, $B = .03, p = .001$, 95% confidence interval (CI) = [.02, .04] (consistent with results calculated with participant NPI), and a non-antagonistically-narcissistic target, $B = .01, p = .03$, 95% confidence interval (CI) = [.001, .02] (inconsistent with results calculated with participant NPI) (see Figure 30). There was no significant association of participant narcissistic admiration and rivalry and the attribution of blame to Jesse for the breakup when Jesse was portrayed as an antagonistically-narcissistic target, $B = .01, p = .11$, 95% confidence interval (CI) = [-.001, .02]⁶ consistent with results calculated with participant NPI) (see Figure 32).

⁶ For narcissistic admiration and rivalry calculated separately, participants' narcissistic admiration did not affect attributions toward the antagonistically-narcissistic target, $B = .01, p = .30$, 95% confidence interval (CI) = [-.01, .02]; but participants high on narcissistic rivalry attributed more blame toward the antagonistically-narcissistic target than participants low on narcissistic rivalry, $B = .02, p = .02$, 95% confidence interval (CI) = [.002, .03].

Table 26

Hierarchical regression of the breakup attributed as Jesse's fault on trait narcissism (using NARQ) and experimental condition in Study 3.

Variable	B	SE (B)	B	ΔR^2
Step 1				.05**
NARQ	.02	.003	.22**	
Step 2				.11**
NARQ	.02	.002	.23***	
D1	1.04	.14	.32**	
D2	1.08	.13	.34**	
Step 3				.03**
NARQ	.03	.004	.44**	
D1	1.04	.13	.32**	
D2	1.10	.13	.35**	
NARQ x D1	-.02	.01	-.17*	
NARQ x D2	-.02	.01	-.20**	

* $p < 0.05$. ** $p < 0.001$.

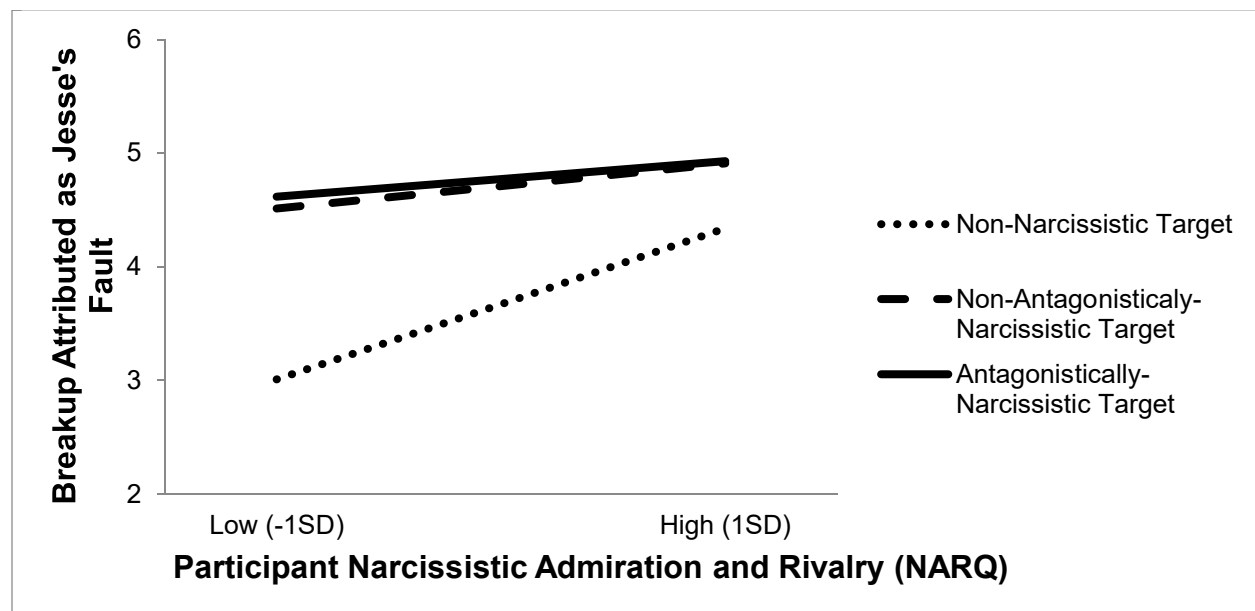


Fig. 32. The interaction of narcissistic admiration and rivalry and condition on the breakup attributed to Jesse in Study 3.

Mediation Analysis (Deservingness and Attribution, NPI and Target Narcissism)

To test the hypothesis that perceptions of responsibility for the breakup and of how much the target deserved negative outcomes will mediate the effects of participant narcissism and target narcissism on empathy, the same program and procedure was used as Studies 1 and 2, and the previous mediation analysis. The mediation variables were deservingness and attribution of blame for the breakup toward Jesse. The direct paths from both interaction terms to attribution and deservingness were significant, as well as the direct path from NPI x ConditionD1 to empathy. The direct paths from attribution and deservingness to empathy were also significant.

There were significant indirect effects of both interaction terms on empathy through deservingness such that: In the non-narcissistic target condition deservingness negatively mediated the relationship, the bootstrapped unstandardized indirect effect was $-.22$, 95% CI $[-.30, -.16]$ (supporting hypothesis); and in the non-antagonistically-narcissistic target condition deservingness negatively mediated the relationship, the bootstrapped unstandardized indirect effect was $-.10$, 95% CI $[-.16, -.05]$ (supporting the hypothesis); but in the antagonistically-narcissistic target condition deservingness did not mediate the relationship, the bootstrapped unstandardized indirect effect was $-.04$, 95% CI $[-.10, .01]$ (opposing the hypothesis) (see Figure 33).

There were no significant indirect effects of both interaction terms on empathy through attribution such that: In the non-narcissistic target condition, attribution did not mediate the relationship, the bootstrapped unstandardized indirect effect was $.001$, 95% CI $[-.03, .03]$ (opposing the hypothesis); in the antagonistically-narcissistic target condition attribution did not mediate the relationship, the bootstrapped unstandardized indirect effect was $.0003$, 95% CI $[-.007, .01]$ (opposing the hypothesis); and in the non-antagonistically-narcissistic target condition

attribution did not mediate the relationship, the bootstrapped unstandardized indirect effect was -.001, 95% CI [-.01, .01] (opposing the hypothesis) (see Figure 33).

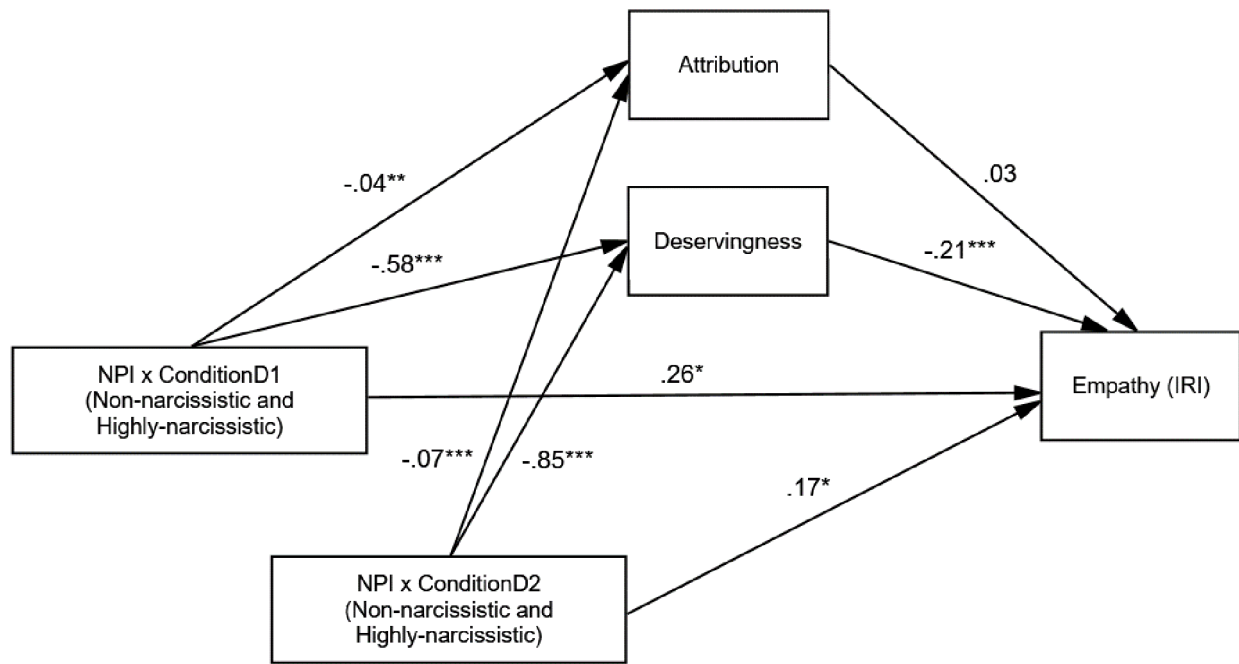


Fig. 33. Path model with unstandardized regression weights. Note. *** $p < .001$; ** $p < .01$; * $p < .05$.

Mediation Analysis (Deservingness and Attribution, NARQ and Target Narcissism)

Parallel analyses were conducted with NARQ scores as the measure of participant narcissism. Consistent with results calculated with participant NPI, the direct paths from both interaction terms to attribution and deservingness were significant, as well as the direct path from NARQ x ConditionD1 to empathy. The direct paths from attribution and deservingness to empathy were also significant.

There were significant indirect effects of both interaction terms on empathy through deservingness such that: In the non-narcissistic target condition deservingness negatively mediated the relationship, the bootstrapped unstandardized indirect effect was -.16, 95% CI [-.19, -.12] (consistent with results calculated using participant NPI and supporting hypothesis); and in the non-antagonistically-narcissistic target condition deservingness negatively mediated the relationship, the bootstrapped unstandardized indirect effect was -.09, 95% CI [-.13, -.06]

(consistent with results calculated using participant NPI and supporting the hypothesis); and in the antagonistically-narcissistic target condition deservingness also negatively mediated the relationship, the bootstrapped unstandardized indirect effect was $-.07$, 95% CI $[-.10, -.04]$ (inconsistent with results calculated using participant NPI and supporting the hypothesis) (see Figure 34).

There were no significant indirect effects of both interaction terms on empathy through attribution such that: In the non-antagonistically-narcissistic target condition, attribution did not mediate the relationship, the bootstrapped unstandardized indirect effect was $.01$, 95% CI $[-.01, .02]$ (consistent with results calculated using participant NPI and opposing the hypothesis); and in the antagonistically-narcissistic target condition, attribution positively mediate the relationship, the bootstrapped unstandardized indirect effect was $.001$, 95% CI $[-.003, .01]$ (consistent with results calculated using participant NPI and opposing the hypothesis); but in the non-narcissistic target condition, attribution did not mediate the relationship, the bootstrapped unstandardized indirect effect was $.001$, 95% CI $[-.002, .01]$ (consistent with results calculated using participant NPI and opposing the hypothesis) (see Figure 34).

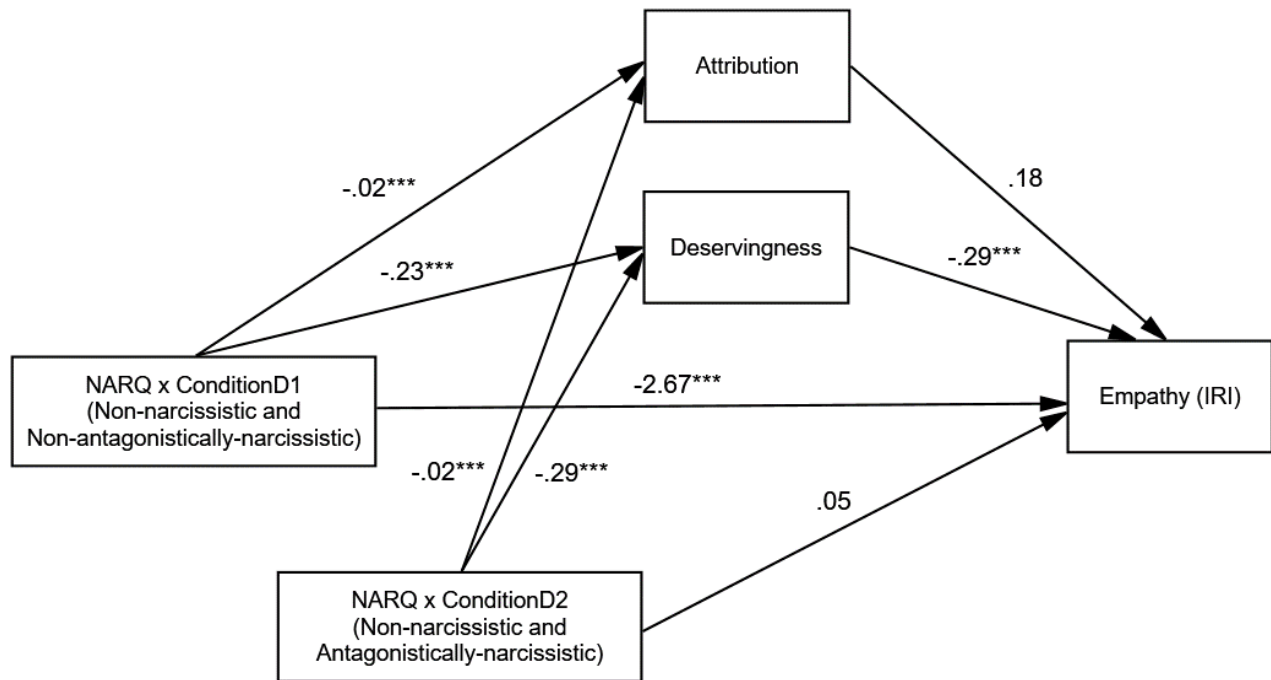


Fig. 34. Path model with unstandardized regression weights. Note. $*** p < .001$; $** p < .01$; $* p < .05$.

Discussion

In support of the first hypothesis, participant narcissism and target narcissism interacted to predict empathy when grandiose narcissism was measured using both the NPI and NARQ. Narcissistic participants (on both measures) were more empathetic toward the non-antagonistically and antagonistically-narcissistic targets, supporting the first hypothesis. Additionally, consistent with the previous results, narcissistic participants (as measured by the NARQ) were either just as empathetic as less narcissistic participants toward the non-narcissistic target (based on the NARQ) or less empathetic (based on the NPI). The findings for the non-narcissistic are partially consistent with existing findings (including earlier studies in this thesis) that narcissistic individuals are less empathetic than non-narcissistic individuals (e.g., Hepper et al., 2014).

In support of the second hypothesis, highly narcissistic participants compared to less narcissistic participants (whether measured by the NPI or NARQ), perceived more similarity and

liking toward, and expected more liking from the non-antagonistically- and antagonistically-narcissistic targets. As well, the interactive effects of participant narcissism (on both the NPI and NARQ) and target narcissism on empathy were mediated by perceived similarity. This suggests that the effect on empathy may be due to perceived similarity and provides further support for the link between similarity and empathy for narcissists.

Contrary to the fourth and fifth hypothesis, highly narcissistic participants attributed just as much blame instead of less, to the antagonistically-narcissistic target; and also perceived the non-narcissistic target to be more deserving of negative outcomes, relative to less narcissistic participants. When grandiose narcissism was measured by both the NPI and NARQ, participants high in narcissism perceived the non-antagonistically- and non-narcissistic targets (and the antagonistically-narcissistic target when grandiose narcissism was measured by the NARQ) as more deserving of negative outcomes; and attributed more blame for the breakup to the non-narcissistic target (and the non-antagonistically-narcissistic target when grandiose narcissism was measured by the NARQ), compared to participants low in narcissism. Generally, more narcissistic participants attributed more blame to, and perceived all targets as more deserving of negative outcomes. This is consistent with literature on the antagonistic tendencies present in narcissism (e.g., Back et al., 2013). It is notable, however, that these tendencies were especially pronounced toward the non-narcissistic target.

Although the findings from Study 3 differ slightly from the attribution findings from Study 2, they also converge in some ways. Similar to Study 2, the attribution results from Study 3 for both analyses completed using the NPI and the NARQ, support the findings from Study 2 that narcissistic participants attribute more blame to the non-narcissistic target compared to less narcissistic participants. The results from grandiose narcissism measured by the NPI and the

NARQ also support the findings from Study 2 that suggest more narcissistic participants perceive non-narcissistic target as more deserving of negative outcomes .

As well, partially supporting hypothesis 6: When grandiose narcissism was measured by the NPI and NARQ, perceptions of deservingness mediated the relationship between participant narcissism and condition on empathy in the non-narcissistic and non-antagonistically-narcissistic target conditions (and the antagonistically-narcissistic target condition when grandiose narcissism was measured by the NARQ), but contrary to Study 2, attribution did not mediate the relationship in any of the target narcissism conditions.

These findings provide novel results related to narcissistic admiration and rivalry (Back et al., 2013). Existing research on similarity in perceived trait narcissism, liking, and empathy uses the NPI as a measure of participant narcissism. Study 3 altered the highly-narcissistic target condition from the previous studies to make the non-antagonistically- and antagonistically-narcissistic target conditions and included the NARQ as a measure of grandiose narcissism to study whether narcissistic admiration and rivalry would affect the results. Our results suggest that participants mostly viewed the non-antagonistically- and antagonistically-narcissistic targets similarly, resulting in the same patterns of results between participant narcissistic admiration and rivalry. Although there were some differences in results depending on whether grandiose narcissism was measured using the NPI or NARQ and also between the results of Study 2 and 3, the results overall are consistent across studies and measures. The most consistent result that comes through all studies suggests that gender does not significantly alter any of the findings (even when target was considered), and people are generally harsher in their perceptions of narcissistic targets than non-narcissistic targets; however, this pattern is less pronounced in highly narcissistic participants compared to less narcissistic participants.

General Discussion

A general lack of empathy for others may help explain antisocial behaviors such as aggression, in narcissistic individuals. In the present research, we sought to expand on existing literature that suggests narcissists can be empathetic when instructed to engage in perspective taking (e.g., Hepper et al., 2014). We sought to examine whether similarity with a target person can cause narcissists to spontaneously empathize with the target without the need for instructed perspective taking. As well, we also tested whether perceptions of similarity, deservingness of negative outcomes, and attribution of responsibility for a negative outcome (i.e., a romantic breakup) mediated the relationship between narcissism and empathy. Our goal was to test whether highlighting a shared similarity between narcissistic individuals and a target person can encourage narcissistic individuals to be more empathetic toward that target. This finding could suggest possible ways to reduce antisocial behaviors in narcissists.

The present findings replicate existing literature on narcissistic tolerance (e.g., Burton et al., 2017; Hart & Adams, 2014) by suggesting that highly narcissistic participants generally liked the highly-narcissistic target more than less narcissistic participants. The findings on liking also extend previous literature by showing that narcissists liked the non-narcissistic target less than less narcissistic individuals; possibly suggesting that narcissists tolerate non-narcissists less than do less narcissistic individuals. As well, the present studies suggest narcissistic participants compared to less narcissistic participants, also expected other narcissists to like them more. This finding may extend existing literature showing that narcissists have some understanding that others view them less positively than they see themselves (e.g., Carlson, Vazire, & Oltmanns, 2011). Similar to existing literature on empathy, the literature on other's perceptions and narcissism do not specify others' levels of narcissism; it may be assumed by participants in those studies that the others are non-narcissistic. Hence, the present findings on expected liking may

suggest that narcissists, compared to less narcissistic individuals, generally expect non-narcissistic others to view them less positively.

Additionally, consistent with past findings, all three studies found that highly narcissistic participants perceived themselves to be more similar to the highly-narcissistic target than did less narcissistic participants. This finding replicates the similarity and narcissism literature (e.g., Burton et al., 2017). However, the results for empathy in the present studies contained some inconsistencies. Although Studies 1a, 1b, 2, and 3 showed that highly narcissistic participants were less empathetic toward the non-narcissistic target compared to less narcissistic participants, the results for the highly-narcissistic target were not consistent across studies. Study 1a replicated existing research in showing that in each target narcissism condition, narcissistic individuals are less empathetic toward others' suffering compared to less narcissistic individuals (e.g., Hepper et al., 2014). However, Study 1b suggested that narcissistic individuals were only less empathetic compared to less narcissistic individuals when the target was portrayed as non-narcissistic; when the target was portrayed as highly-narcissistic or moderately-narcissistic, narcissistic individuals were just as empathetic as less narcissistic individuals. Studies 2 and 3 then suggested that contrary to existing literature (e.g., Hepper et al., 2014), narcissistic individuals were more empathetic than less narcissistic individuals toward a highly-narcissistic target. The difference in results between Study 1a and 1b, however, may be due to Study 1a consisting of an undergraduate sample and having relatively modest power.

Despite these inconsistencies, the results across the present studies were highly parallel in many ways. The studies all largely suggest that narcissistic targets were less liked, received less empathy, attributed more blame, and perceived as more deserving of negative outcomes, compared to non-narcissistic targets. This pattern of results was clearest for less narcissistic participants and generally attenuated (or absent) in highly narcissistic participants. Overall, the

current findings suggest that narcissistic individuals are less empathetic than less narcissistic individuals when the target is portrayed as non-narcissistic, but narcissistic individuals may be at least as empathetic as less narcissistic individuals when the target is portrayed as highly-narcissistic. These findings imply that similarity in perceived trait narcissism encourages narcissistic individuals to spontaneously empathize with a target at least as much as do less narcissistic individuals (though not more).

The mediation analysis suggests that less narcissistic individuals perceive less similarity to narcissistic targets which leads to less empathy toward those targets. As well, less narcissistic individuals attributed more blame for the breakup to the narcissistic targets and thought the narcissistic targets deserved more negative outcomes, which also lead to less empathy toward those targets. Existing literature suggests that—in the long run, though not on first acquaintance—most people dislike narcissists because narcissists are generally hostile, selfish, overly dominant, and arrogant (e.g., Back, Schmukle, & Egloff, 2010; Bushman & Baumeister, 1998; Hart & Adams, 2014; Morf & Rhodewalt, 2001; Paulhus, 1998). The findings from the present studies suggest that narcissists are generally disliked. Moreover, the present studies extend existing literature by suggesting that people's disliking of narcissists may influence empathy toward them as well as perceptions of how much they deserve to have negative outcomes happen to them, and how much to blame they are for negative outcomes. It should be noted that existing literature suggests that narcissists are generally liked at zero acquaintance if they display aspects of narcissistic admiration (e.g., self-assurance) and disliked if they display aspects of antagonism associated with rivalry (e.g., Back et al., 2010); but the results of Study 3 suggest that the non-antagonistically-narcissistic target was less liked than the non-narcissistic target, even though the non-antagonistically-narcissistic target did not display obvious antagonism. We suspect this is due to the non-antagonistically-narcissistic target displaying more

extreme degrees of self-enhancement than would be found in naturalistic interactions. However, Study 3 may suggest that contrary to Back et al. (2010), even narcissistic admiration can be off-putting in extreme cases.

Implications

This research investigated a missing link in the similarity and empathy literatures in regards to narcissism. Studies on similarity and narcissism have included both non-narcissistic and narcissistic targets (e.g., Burton et al., 2017; Hart & Adams, 2014); however, studies on empathy and narcissism have not considered target narcissism. Given that the current findings for the non-narcissistic targets generally replicate existing literature, we suspect that the lack of information concerning target narcissism in existing studies (e.g., Hepper et al., 2014) may have led participants to perceive the targets in those studies as non-narcissistic. The addition of narcissistic targets provides a novel contribution to this area of research by demonstrating that narcissistic individuals are not always less empathetic than less narcissistic individuals.

This research also has implications for how narcissists experience empathy. The findings imply that similarity to the target may facilitate empathy for narcissists, given that the results suggest similarity in perceived trait narcissism mediates the relationship between the interaction of participant narcissism and target narcissism on empathy. This finding implies that although narcissists' may naturally display low levels of empathy, highlighting similarity in perceived trait narcissism with a target may be enough to motivate narcissists to empathize more with the target, at least as much as less narcissistic individuals. This notion is consistent with narcissists being more tolerant of other narcissists (Hart & Adams, 20014), and less aggressive toward similar others (Konrath et al., 2006).

Additionally, the results of these studies provide novel findings in the areas of deservingness of negative outcomes and attributions of blame for them in relation to narcissism.

The results for attributions were inconsistent across studies, which possibly suggests that a different manipulation or approach should be taken to examine the relationship between attributions of blame for negative outcomes and narcissism. For deservingness, narcissistic participants generally perceived the targets as more deserving of negative outcomes compared to less narcissistic participants, regardless of target narcissism. This implies that although narcissists believe themselves to deserve positive outcomes such as special treatment (e.g., Bishop & Lane, 2002), they may perceive others as deserving negative outcomes. This may be consistent with the antagonistic aspect of narcissism that consists of striving for superiority by seeing others as inferior and wanting others to fail (Back et al., 2013).

The results of these studies also suggest that highly narcissistic participants' empathy is less affected by target narcissism than that of narcissistic participants. Where there was a difference in empathy toward the different targets between narcissistic and less narcissistic participants, most of the time, the difference was driven by the results from less narcissistic participants. This may suggest that narcissists' empathic responses do not naturally fluctuate too much, which may be the result of their lack of affective empathy (i.e., Hepper, Hart, & Sedikides, 2014).

Limitations

The present studies possess a few limitations. The first limitation is that although the target narcissism interview responses for Studies 1-2 were adapted from Burton et al.'s (2017) study, where target narcissism for each interview response was assessed in a pilot survey, the altered target interview responses in Study 3 were not pilot tested to ensure that each response was representative of the target condition it belonged to. However, a target narcissism manipulation check was included at the end of Study 3, and results showed that participants did

perceive the non-antagonistically- and antagonistically-narcissistic targets as significantly more narcissistic than the non-narcissistic target.

The present studies suggest that, overall, narcissists were less empathetic toward the non-narcissistic target compared to less narcissistic individuals, and this tendency is attenuated for narcissistic targets such that narcissistic participants generally empathized just as much with them as less narcissistic participants (except in Study 1a). Combined with the mediation results for similarity, these findings suggest that similarity affects the extent to which people experience empathy toward narcissistic targets. However, the second limitation is the inconsistent empathy results in all three studies. Although power was increased with each study, results for empathy were still inconsistent. This may point to a need to further examine the relationship between narcissism, similarity, and empathy. As well, there may be a need to refine the methodology or procedure used. This may suggest a need to test other types of similarity (e.g., attitudinal) in future studies. Future research may be needed to help clarify the findings to determine the source of these inconsistencies.

The third limitation is that when reverse mediation models are examined for all mediation models in the present studies, the reverse models are all significant. This suggests that the data are consistent with multiple causal orders of the variables and may need to be examined further. For example, it could be the case that the interaction of participant narcissism and target narcissism directly affects the degree of empathy participants experienced, which influences their perceptions of target deservingness to negative outcomes. An experimental approach might help to establish the causal order of the variables examined in these studies. Accordingly, future research could manipulate the extent to which the target is perceived as deserving negative outcomes (e.g., including information on whether the target was faithful or unfaithful in their romantic relationship) before observing empathy toward the target. Nonetheless, this is a

common problem with cross-sectional mediation models; more experimental approaches to manipulating the mediator may be needed to infer causality.

The fourth limitation is the research methodology. All studies were conducted online, and Studies 1b-3 were conducted through MTurk, where there may have been a lack of a standard, controlled environment. The present studies required at least 30-60 minutes of time to complete and consisted of multiple audio files participants were required to listen to. Since we were not able to monitor MTurk participants or every undergraduate participant, the participants may have had limited focus and motivation while completing the study. Although an open-ended question was included at the end of the study asking participants if there were any reasons to exclude their data from analysis, it may not have screened out all inattentive participants.

Future Directions

The present study examined the effects of similarity in narcissism on empathy. Future research could consider whether other kinds of similarity might also elicit greater empathy from narcissists. This possibility could be tested with a broader similarity manipulation that does not focus specifically on levels of narcissism; for example, more general similarities (e.g., similarities in general preferences or opinions) could be manipulated.

Future research should also consider other types of target difficulty. The present studies utilized a target talking about his/her difficulty with a romantic breakup; future research could consider the relatability of the target difficulty. Since most of our study sample were MTurk workers, the target difficulty we used (i.e., a university student breaking up with their girlfriend/boyfriend) may not have been as relatable to older participants or participants who have not attended secondary education. However, participants' high relatability to the target difficulty in Study 1a with the undergraduate sample, may have overpowered the effects of similarity and encouraged greater perspective taking and empathy toward all targets. As well, the

controllability of the target difficulty could be taken into consideration. A romantic breakup may be seen as something people generally have some control over, but events such as accidents or illnesses may be considered less controllable. This aspect of negative events may be especially relevant to perceptions of deservingness and attributions of blame, which may be stronger mediators of the empathy effect when controllability of the target's difficulty is high. Future research can also examine whether the similarity manipulation can be extended to more than one target instead of a specific, single target individual, and whether this can encourage narcissists to empathize with people in general. Also, prosocial, helping behaviors can be examined as a potential consequence of empathy, to link the findings to a behavioral act of empathy.

Additionally, the present studies only examined perceptions of how deserving targets were of negative outcomes. Future research could examine whether the effects of the present study are limited to these types of negative outcomes. For example, negative financial or emotional outcomes could be examined. As well, future research could consider using different measures of empathy and attribution. Davis's (1980) Interpersonal Reactivity Index is often considered to measure cognitive and affective empathy (Chrysikou & Thompson, 2015), but it was originally designed to only measure dispositional empathy. In relation to the attribution measure, we only utilized one item from the attribution component of the study due to low reliability between all the attribution items; future research could consider using a measure with stronger scale reliability.

Conclusion

In sum, the present research provides novel evidence that narcissists are not always less empathetic than less narcissistic individuals, and that similarity influences empathy toward more or less narcissistic individuals. When participants in the present study listened to narcissistic targets' interviews and descriptions of their struggles with a romantic breakup, narcissistic

participants perceived more similarity toward the narcissistic targets than less narcissistic individuals, and were generally just as empathetic as less narcissistic individuals toward the narcissistic targets. Thus, target narcissism, and the degree of similarity in perceived trait narcissism with a target, may shape experiences of empathy. These findings may provide novel insights into the behaviors of narcissists.

Appendix A – Correlations

Table 27

Correlations of dependent variables for Study 1a, N = 232

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Similarity	13.15	7.81	-		
2. Liking	35.04	18.93	.83**	-	
3. Expected Liking	38.29	6.97	.60**	.70**	-
4. Empathy	37.72	8.65	.12	.19**	.17**

* $p < .05$ ** $p < .01$

Table 28

Correlations of dependent variables for Study 1b, N = 488

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Similarity	13.66	8.05	-		
2. Liking	38.70	21.33	.78**	-	
3. Expected Liking	39.29	9.71	.65**	.81**	-
4. Empathy	34.81	10.86	.39**	.50**	.43**

* $p < .05$ ** $p < .01$

Table 29

Correlations of dependent variables for Study 2, N = 590

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Similarity	14.87	8.02	-				
2. Liking	40.76	20.23	.85**	-			
3. Expected Liking	43.36	17.01	.76**	.88**	-		
4. Empathy	35.19	10.25	.40**	.47**	.47**	-	
5. Deservingness	56.63	16.21	-.21**	-.30**	-.30**	-.53**	-
6. Attribution to Emily	4.38	1.49	-.31**	-.37**	-.31**	-.47**	.68**

* $p < .05$ ** $p < .01$

Table 30

Correlations of dependent variables for Study 3, N = 648

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Similarity	13.58	8.35	-				
2. Liking	35.72	21.71	.88**	-			
3. Expected Liking	39.06	11.04	.72**	.82**	-		
4. Empathy	36.21	8.46	.41**	.46**	.40**	-	
5. Deservingness	58.58	17.00	-.10**	-.14**	.10**	-.41**	-
6. Attribution to Jesse	4.39	1.51	-.23**	-.25**	-.04	-.33**	.69**

* $p < .05$ ** $p < .01$

Appendix B – Study 1b Pre-Study Instructions

Please ensure that you complete the study on a device with working sound, as you will be required to listen to audio files in this study.

Please complete the study in a quiet area where you will be able to hear the audio from this study.

We recommend the use of earphones or headphones.

Appendix B – Study 1 Measures

For the first part of the study, you will be asked to complete a short questionnaire that will assess your personality.

40-Item Narcissistic Personality Inventory (NPI)

This inventory consists of a number of pairs of statements with which you may or may not identify.

Consider this example:

A. I like having authority over people

B. I don't mind following orders

Which of these two statements is closer to your own feelings about yourself? If you identify more with "liking to have authority over people" than with "not minding following orders", then you would choose option A.

You may identify with both A and B. In this case you should choose the statement which seems closer to yourself RIGHT NOW. Or, if you do not identify with either statement at this moment, select the one which is least objectionable or remote. In other words, read each pair of statements and then choose the one that is closer to your own feelings. Indicate your answer by selecting the appropriate letter (A or B).

- | | | |
|----|---|----------|
| 1. | A. I have a natural talent for influencing people. | |
| | B. I am not good at influencing people. | 1. _____ |
| 2. | A. Modesty doesn't become me. | |
| | B. I am essentially a modest person. | 2. _____ |
| 3. | A. I would do almost anything on a dare. | |
| | B. I tend to be a fairly cautious person. | 3. _____ |
| 4. | A. When people compliment me I sometimes get embarrassed. | |

- B. I know that I am good because everybody keeps telling me so. 4. _____
5. A. The thought of ruling the world frightens the hell out of me.
B. If I ruled the world it would be a better place. 5. _____
6. A. I can usually talk my way out of anything.
B. I try to accept the consequences of my behaviour. 6. _____
7. A. I prefer to blend in with the crowd.
B. I like to be the center of attention. 7. _____
8. A. I will be a success.
B. I am not too concerned about success. 8. _____
9. A. I am no better or worse than most people.
B. I think I am a special person. 9. _____
10. A. I am not sure if I would make a good leader.
B. I see myself as a good leader. 10. _____
11. A. I am assertive.
B. I wish I were more assertive. 11. _____
12. A. I like to have authority over other people.
B. I don't mind following orders. 12. _____
13. A. I find it easy to manipulate people.
B. I don't like it when I find myself manipulating people. 13. _____
14. A. I insist upon getting the respect that is due me.
B. I usually get the respect that I deserve. 14. _____
15. A. I don't particularly like to show off my body.
B. I like to show off my body. 15. _____
16. A. I can read people like a book.
B. People are sometimes hard to understand. 16. _____
17. A. If I feel competent I am willing to take responsibility for making decisions.
B. I like to take responsibility for making decisions. 17. _____
18. A. I just want to be reasonably happy.
B. I want to amount to something in the eyes of the world. 18. _____
19. A. My body is nothing special.
B. I like to look at my body. 19. _____

20. A. I try not to be a show off.
B. I will usually show off if I get the chance. 20. _____
21. A. I always know what I am doing.
B. Sometimes I am not sure of what I am doing. 21. _____
22. A. I sometimes depend on people to get things done.
B. I rarely depend on anyone else to get things done. 22. _____
23. A. Sometimes I tell good stories.
B. Everybody likes to hear my stories. 23. _____
24. A. I expect a great deal from other people.
B. I like to do things for other people. 24. _____
25. A. I will never be satisfied until I get all that I deserve.
B. I take my satisfactions as they come. 25. _____
26. A. Compliments embarrass me.
B. I like to be complimented. 26. _____
27. A. I have a strong will to power.
B. Power for its own sake doesn't interest me. 27. _____
28. A. I don't care about new fads and fashions.
B. I like to start new fads and fashions. 28. _____
29. A. I like to look at myself in the mirror.
B. I am not particularly interested in looking at myself in the mirror. 29. _____
30. A. I really like to be the center of attention.
B. It makes me uncomfortable to be the center of attention. 30. _____
31. A. I can live my life in any way I want to.
B. People can't always live their lives in terms of what they want. 31. _____
32. A. Being an authority doesn't mean that much to me.
B. People always seem to recognize my authority. 32. _____
33. A. I would prefer to be a leader.
B. It makes little difference to me whether I am a leader or not. 33. _____
34. A. I am going to be a great person.
B. I hope I am going to be successful. 34. _____

35. A. People sometimes believe what I tell them.
B. I can make anybody believe anything I want them to. 35. _____
36. A. I am a born leader.
B. Leadership is a quality that takes a long time to develop. 36. _____
37. A. I wish somebody would someday write my biography.
B. I don't like people to pry into my life for any reason. 37. _____
38. A. I get upset when people don't notice how I look when I go out in public.
B. I don't mind blending into the crowd when I go out in public. 38. _____
39. A. I am more capable than other people.
B. There is a lot that I can learn from other people. 39. _____
40. A. I am much like everybody else.
B. I am an extraordinary person. 40. _____

Rosenberg Self-Esteem Scale

Listed below are a number of statements about how people feel about themselves. Please read each statement and decide whether you agree or disagree that the statement describes you, and to what extent. Please use the scale below and select the number that best represents how you feel in general.

Very Strongly Disagree	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neutral	Slightly Agree	Moderately Agree	Strongly Agree	Very Strongly Agree
1	2	3	4	5	6	7	8	9

- | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|
| 1. I feel that I am a person of worth, at least on an equal basis with others. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 2. I feel that I have a number of good qualities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 3. All in all, I am inclined to feel that I am a failure. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 4. I am able to do things as well as most other people. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 5. I feel I do not have much to be proud of. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 6. I take a positive attitude toward myself. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

7. On the whole, I am satisfied with myself. 1 2 3 4 5 6 7 8 9
8. I wish I could have more respect for myself. 1 2 3 4 5 6 7 8 9
9. I certainly feel useless at times. 1 2 3 4 5 6 7 8 9
10. At times I think I am no good at all. 1 2 3 4 5 6 7 8 9

Preference for Consistency Scale

Listed below are a number of statements about how people feel about themselves. Please read each statement listed below and decide whether you agree or disagree that the statement describes you, and to what extent. Please use the scale below and select the number that best represents how you feel in general.

Strongly Disagree	Disagree	Somewhat Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7	8	9

1. I prefer to be around people whose reactions I can anticipate. 1 2 3 4 5 6 7 8 9
2. It is important to me that my actions are consistent with my beliefs. 1 2 3 4 5 6 7 8 9
3. Even if my attitudes and actions seemed consistent with one another to me, it would bother me if they did not seem consistent in the eyes of others. 1 2 3 4 5 6 7 8 9
4. It is important to me that those who know me can predict what I will do. 1 2 3 4 5 6 7 8 9
5. I want to be described by others as a stable, predictable person. 1 2 3 4 5 6 7 8 9
6. Admirable people are consistent and predictable. 1 2 3 4 5 6 7 8 9
7. The appearance of consistency is an important part of the image I present to the world. 1 2 3 4 5 6 7 8 9

- | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|
| 8. It bothers me when someone I depend upon is unpredictable. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 9. I don't like to appear as if I am inconsistent. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10. I get uncomfortable when I find my behavior contradicts my beliefs. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 11. An important requirement for any friend of mine is personal consistency. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 12. I typically prefer to do things the same way | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| . | | | | | | | | | |
| 13. I dislike people who are constantly changing their opinions. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 14. I want my close friends to be predictable. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 15. It is important to me that others view me as a stable person. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 16. I make an effort to appear consistent to others. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 17. I'm uncomfortable holding two beliefs that are inconsistent. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 18. It doesn't bother me much if my actions are inconsistent. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Target Interview Audio Manipulation

In a previous journal study, we had participants make monthly audio recordings where they talked about the events in their lives. We also recorded interviews with the participants, where they were asked to provide their honest responses to a variety of questions designed to help others get to know them. Although the participant in the audio recording you are about to hear answered many different questions during her interview, we selected 7 questions and answers that best describe the participant for you to hear.

Afterward, you will be asked to answer some questions about your impression of the participant in the audio recording.

(Study 1a) Please put on your headphones.

(Study 1b) Please turn on the volume of your electronic device and put on your earphones/headphones (optional), and make sure you are in a quiet area so you can hear the audio recordings.

On the next page, you will see 7 questions. Below each question is an audio recording of a participant named Emily answering that question.

Please read each question carefully, and then click the play button to listen to the audio recording containing Emily's answer.

Please repeat this process until you reach the bottom of the page.

Question 1: When you are working in a group, how do you compare to others in term of leadership ability?

Highly-narcissistic target condition: "I don't think people even compare to me in leadership ability."

Moderately-narcissistic target condition: "I'm usually the leader in the group. I think people naturally follow me because I have good ideas."

Non-narcissistic target condition: "I'd say average? I usually don't feel like I have more leadership experience than most other people."

Question 2: At school, do you generally get along with your professors and classmates?

Highly-narcissistic target condition: "It isn't whether or not I get along with them; it is whether they can get along with me."

Moderately-narcissistic target condition: "As long as they are nice to me, we usually get along fine."

Non-narcissistic target condition: "I try to be pretty friendly. There's no sense in being difficult for no reason."

Question 3: If you were given the opportunity to teach your PS 101 course, how do you think you would do?

Highly-narcissistic target condition: "I'd probably do better than the other 101 teachers at this school."

Moderately-narcissistic target condition: "I'd do better than the other students in my class, but probably not my teacher."

Non-narcissistic target condition: "I don't have a degree in psychology, so probably not too great."

Question 4: If a teacher taught you a specific task, but you figured out a more efficient way of doing it, what would you do?

Highly-narcissistic target condition: "If? This always happens. Sometimes I correct the professor, but I know it's not my job to make everyone's life easier."

Moderately-narcissistic target condition: "I would definitely bring it up after class and point out that there is a better way of doing it than what the professor is teaching."

Non-narcissistic target condition: “Well, if I thought I had a better solution, I might talk to my professor after class about it to get some feedback.”

Question 5: How do you feel when you unexpectedly become the center of attention?

Highly-narcissistic target condition: “What do you mean unexpectedly? I’m usually the center of attention, so I’d sort of expect it.”

Moderately-narcissistic target condition: “I like being the center of attention; it gives me a chance to entertain people.”

Non-narcissistic target condition: “I don’t necessarily like it, but sometimes you just have to go with it.”

Question 6: Given your current accomplishments, would you consider yourself successful?

Highly-narcissistic target condition: “Definitely. I have accomplished more than what most people have accomplished in a lifetime and I’ve still got a wide road ahead of me.”

Moderately-narcissistic target condition: “Pretty successful for being my age, but nothing compared to what I will accomplish in the future.”

Non-narcissistic target condition: “I’m sure there are others more successful than me, but I’m happy with my accomplishments.”

Question 7: What part of school is most challenging for you?

Highly-narcissistic target condition: “School isn’t challenging for me. I really don’t even need to be in university.”

Moderately-narcissistic target condition: “Time management is the most challenging for me, but I’m good at everything else.”

Non-narcissistic target condition: “I think the most challenging part of school is just learning how to juggle everything at once. There is no one thing in particular; it’s all of it together.”

Question 8: Would you say that you’re a people-person?

Highly-narcissistic target condition: “I’d say so. When people don’t like me, it’s usually because they’re insecure with themselves.”

Moderately-narcissistic target condition: “People seem to like me, so I’d say I’m a people person.”

Non-narcissistic target condition: “Sometimes. I mean, I can make friends, but I doubt I’d be good in sales.”

For the next part of the study, you will answer some questions about your impression of Emily.

Similarity

Listed below are a number of statements about how you feel toward Emily. Please read each statement and record your responses using the scale provided.

(1) = (2) (3) (4) (5) (6) (7) (8) (9) (10) =
Strongly Strongly
disagree agree

1. I think Emily and I are similar in a lot of ways. 1 2 3 4 5 6 7 8 9 10

2. I have a completely different personality than Emily.[r] 1 2 3 4 5 6 7 8 9 10

3. Emily and I probably have a lot of things in common. 1 2 3 4 5 6 7 8 9 10

Liking

Listed below are a number of statements about how you feel toward Emily. Please read each statement and record your responses using the scale provided.

(1) = (2) (3) (4) (5) (6) (7) (8) (9) (10) =
Strongly Strongly
disagree agree

1. I think Emily seems likable. 1 2 3 4 5 6 7 8 9 10 10

2. I think Emily seem like a pleasant person. 1 2 3 4 5 6 7 8 9 10 10

3. I think it would be pleasant to make friends with Emily. 1 2 3 4 5 6 7 8 9 10 10

4. I think I would like Emily if I met her in real life. 1 2 3 4 5 6 7 8 9 10 10

5. I think I would enjoy working with Emily in an experiment. 1 2 3 4 5 6 7 8 9 10 10

6. I have a negative impression of Emily. [r] 1 2 3 4 5 6 7 8 9 10 10

7. I have a positive impression of Emily. 1 2 3 4 5 6 7 8 9 10 10

Meta-perceptions of Liking

Listed below are a number of statements about how you feel toward Emily. Please read each statement and record your responses using the scale provided.

(1) = (2) (3) (4) (5) (6) (7) (8) (9) (10) =
Strongly Strongly
disagree agree

1. I think Emily would think I'm a pleasant person. 1 2 3 4 5 6 7 8 9 10 10

2. I think Emily would think it would be pleasant to make friends with me.	1	2	3	4	5	6	7	8	9	10	10
3. I think Emily would be friendly toward me if she met me in real life.	1	2	3	4	5	6	7	8	9	10	10
4. I think Emily would like me if she met me in real life.	1	2	3	4	5	6	7	8	9	10	10
5. I think Emily would enjoy working with me in an experiment.	1	2	3	4	5	6	7	8	9	10	10
6. I think Emily would have a negative impression of me. [r]	1	2	3	4	5	6	7	8	9	10	10
7. I think Emily would have a positive impression of me.	1	2	3	4	5	6	7	8	9	10	10

Difficulty Audio

(Study 1a) Please put on your headphones.

(Study 1b) Please turn on the volume of your electronic device and put on your earphones/headphones (earphone/headphone use is optional), and make sure you are in a quiet area so you can hear the audio recordings.

The next part of the study contains another audio recording from Emily's participation in the journal study.

You will listen to one of Emily's monthly audio recordings where she describes a difficulty she has been experiencing in her life. Afterward, you will be asked to answer some questions about the recording.

Again, you will first see a question, then Emily's answer below in the form of an audio recording. Please read the question carefully, and then click the play button to listen to the audio recording.

Question: Spend some time describing a significant challenge you've experienced in some detail. Describe the most significant thing that you've struggled with emotionally, recently.

"Okay, I wouldn't normally talk about this, because I don't really like talking about my feelings, or difficulties I'm having. I usually just deal with them. But I have had a hard time because of my relationship—my ex-relationship. We- uh broke up about a week ago. And I didn't see it coming... at all. I mean, we were fighting, but, every couple fights, right? And... I didn't think that would be it after 2 years. It's the longest I've ever been with anyone. We've been together since high school. He was the most popular guy, and I had him. But, yea... uh... he just, came into my room after we had a fight, and I thought he was gonna make up like usual. I went to kiss him, and he stopped me. And sat me down, and said he was sorry, but it wasn't working, that I had changed, and-uh- he didn't wanna be in a relationship with me anymore because it was too draining. I'm not used to people breaking up with me. It's really hard, because I can't get any space, from him. Uh, we live together, with other people. But, still. And, um, when we moved in, I took the stupid little box room because, he had the really big room with the whole bed, and

since I was going to spend all my time sleeping in there anyway, it didn't seem to matter. But I'm stuck curled up in this tiny little box room now. He could have at least given me the bigger room after breaking up with me. I spent, most of my first year with him as well. So I never really got to know anyone in my classes very well. So there's no one I can really call and go hang out with now. I'm sure I'll make friends, but it doesn't make the break-up any easier. All my friends are his friends too. I'm... embarrassed to say it, but it's affecting my coursework. I can't concentrate. Every time I sit down to do an essay or a revision or whatever, I just, get distracted, wondering how he could have broken up with me-- I'm not used to being rejected. Was there something I could have done differently? I missed the deadline... a big one. I'm halfway through my university experience and I feel stupid letting the breakup get to me. I realize now how much I let my life get wrapped up with his life. Well... it's a bit awkward in the house. Everybody's just... being careful and kinda tiptoeing around me and I have to act like everything is normal. It sucks. He doesn't really know how I feel. I haven't told him. I just feel like I have to pull myself together. I thought we'd just stay together and never imagined I'd be so bothered by breaking up. Halfway through my second year, and I've signed a house with him. Been here with the same people, so, they say that I have to pay rent on the house even if I could find somewhere else. And if I go I still have to pay the rent, and... I hate being in the house now. I miss the compliments he gave me... telling me I was the best thing in his life, calling me beautiful... He really paid attention to me. He went out last night, and never came home. Maybe it shouldn't bother me, but I get angry at the thought of him hooking up with some random girl. We seriously just broke up, like a week ago. I just don't know what's best to do now. Why would he break up with me? I feel like an idiot for letting myself get so caught up with him. I guess I just don't know what comes next."

For the next part of the study, you will complete a short questionnaire that assesses your response to the difficult Emily has just described.

Empathy

The following statements inquire about your thoughts and feelings in regards to how you felt toward Emily while listening to her talk about her difficulty. For each item, indicate how well it describes you by recording your response using the scale provided. Please read each item carefully before responding and answer as honestly as you can.

(1) = Does not describe me well	(2)	(3)	(4)	(5) = Describes me very well
				1 2 3 4 5
1. I could imagine Emily's breakup happening to me. (Fantasy scale)				
2. I had concerned feelings for Emily. (Empathic concern)				1 2 3 4 5
3. I found it difficult to see things from Emily's point of view. (Perspective taking) [-]				1 2 3 4 5

- | | | | | | |
|--|---|---|---|---|---|
| 4. I didn't feel very sorry for Emily's situation. (Empathic concern) [-] | 1 | 2 | 3 | 4 | 5 |
| 5. I really got involved with how Emily felt. (Fantasy scale) | 1 | 2 | 3 | 4 | 5 |
| 6. When listening to Emily describe her breakup, I felt apprehensive and ill-at-ease. (Personal distress) | 1 | 2 | 3 | 4 | 5 |
| 7. I felt objective when listening to Emily describe her breakup, and I wasn't completely caught up in it. (Fantasy scale) [-] | 1 | 2 | 3 | 4 | 5 |
| 8. I tried to look at Emily's side of her breakup. (Perspective taking) | 1 | 2 | 3 | 4 | 5 |
| 9. I felt kind of protective towards Emily. (Empathic concern) | 1 | 2 | 3 | 4 | 5 |
| 10. I felt helpless when listening to Emily describe her breakup. (Perspective distress) | 1 | 2 | 3 | 4 | 5 |
| 11. I tried to understand Emily better by imagining how things look from her perspective. (Perspective taking) | 1 | 2 | 3 | 4 | 5 |
| 12. Although Emily was hurt over her breakup, I remained calm while listening to her. (Personal distress) [-] | 1 | 2 | 3 | 4 | 5 |
| 13. Emily's misfortune did not disturb me a great deal. (Empathic concern) [-] | 1 | 2 | 3 | 4 | 5 |
| 14. After hearing Emily talk about her breakup, I felt as though I were in her place. (Fantasy scale) | 1 | 2 | 3 | 4 | 5 |
| 15. Being in Emily's situation would scare me. (Personal distress) | 1 | 2 | 3 | 4 | 5 |
| 16. When I thought of Emily being treated unfairly, I didn't feel very much pity for her. (Empathic concern) [-] | 1 | 2 | 3 | 4 | 5 |
| 17. I am usually pretty effective in dealing with problems like the one Emily described. (Personal distress) | 1 | 2 | 3 | 4 | 5 |
| 18. I was quite touched listening to Emily describe her breakup. (Empathic concern) | 1 | 2 | 3 | 4 | 5 |
| 19. I felt soft-hearted toward Emily. (Empathic concern) | 1 | 2 | 3 | 4 | 5 |
| 20. When listening to Emily describe her challenge, I could very easily put myself in her place. (Fantasy scale) | 1 | 2 | 3 | 4 | 5 |
| 21. I would lose control in Emily's situation. (Personal distress) | 1 | 2 | 3 | 4 | 5 |
| 22. To understand better how Emily is feeling, I was able to put myself in Emily's shoes. (Perspective taking) | 1 | 2 | 3 | 4 | 5 |

23. When listening to Emily describe her breakup, I imagined how I would feel 1 2 3 4 5
if the events of her breakup were happening to me. (Fantasy scale)

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This scale consists of a number of words that describe different feelings and emotions. Read each item and then circle the appropriate answer next to that word. Indicate to what extent you have felt this way during the past week.

Use the following scale to record your answers.

(1) = Very slightly or not at all (2) = A little (3) = Moderately (4) = Quite a bit (5) = Extremely

1. Interested	1	2	3	4	5
2. Distressed	1	2	3	4	5
3. Excited	1	2	3	4	5
4. Upset	1	2	3	4	5
5. Strong	1	2	3	4	5
6. Guilty	1	2	3	4	5
7. Scared	1	2	3	4	5
8. Hostile	1	2	3	4	5
9. Enthusiastic	1	2	3	4	5
10. Proud	1	2	3	4	5
11. Irritable	1	2	3	4	5
12. Alert	1	2	3	4	5
13. Ashamed	1	2	3	4	5
14. Inspired	1	2	3	4	5
15. Nervous	1	2	3	4	5
16. Determined	1	2	3	4	5

17. Attentive	1	2	3	4	5
18. Jittery	1	2	3	4	5
19. Active	1	2	3	4	5
20. Afraid	1	2	3	4	5

Appendix B – Study 1a Demographic Questionnaire

Age ____

Gender: Male ____ Female ____ Other ____

Academic Major: _____

Year of Study: _____

Ethnicity:

____ Caucasian

____ East Asian

____ South Asian

____ Middle Eastern

____ African

____ Latin, Central, and South American

____ Caribbean

____ Aboriginal

____ Other -- please specify: _____

What do you think this study was about? _____

Appendix B – Study 1b Demographic Questionnaire

This information is helpful to ensure that we have a representative sample of participants in our study.

Age ____

Gender: Male ____ Female ____ Other ____ Please specify (optional) ____

Are you currently employed?

- _____ No
- _____ Yes, part-time
- _____ Yes, full-time
- _____ Retired
- _____ Student

Please indicate your current household income in USD.

- _____ Rather not say
- _____ Under \$10,000
- _____ \$10,000 - \$19,999
- _____ \$20,000 - \$29,999
- _____ \$30,000 - \$39,999
- _____ \$40,000 - \$49,999
- _____ \$50,000 - \$74,999
- _____ \$75,000 - \$99,999
- _____ \$100,000 - \$150,000
- _____ Over \$150,000

Please indicate your ethnic origin by choosing one of the categories listed below. Ethnic origin refers to the ethnic or cultural group(s) to which your recent ancestors belonged. Ethnic origin pertains to ancestral identity or background and should not be confused with citizenship or nationality. If you have multiple ethnic origins, then please select the one you most strongly identify with. If this is not possible, then leave this question blank.

- _____ Caucasian
- _____ East Asian
- _____ South Asian
- _____ Middle Eastern
- _____ African
- _____ Latin, Central, and South American
- _____ Caribbean

_____ Aboriginal

_____ Other -- please specify: _____

What do you think this study was about? _____

Are there any reasons to disclude your answers from analysis?

Appendix C – Study 2 Pre-Study Instructions

Please ensure that you complete the study on a device with working sound, as you will be required to listen to audio files in this study.

Please complete the study in a quiet area where you will be able to hear the audio from this study.

We recommend the use of earphones or headphones.

Appendix C – Study 2 Measures

40-Item Narcissistic Personality Inventory (NPI)

Rosenberg Self-Esteem Scale

Preference for Consistency Scale

Target Interview Audio Manipulation

Similarity

Liking

Meta-perceptions of Liking

Difficulty Audio

Empathy

Deservingness & Attribution

Next, you will be answering some questions about your opinions on the difficult Emily has just described.

The following statements inquire about your opinions in regards to how you felt while listening to Emily talk about her difficulty. Please read each statement and record your responses using the scale provided.

1	2	3	4	5	6
Strongly Disagree					Strongly Agree
1. I'd like to feel sorry for Emily after her breakup, but deep down, I don't feel she deserves my empathy.	1	2	3	4	5 6
2. Emily deserves to feel down after her breakup.	1	2	3	4	5 6
3. Emily deserves to eventually feel better after her breakup.	1	2	3	4	5 6
4. Emily deserved to be broken up with.	1	2	3	4	5 6
5. Emily is unworthy of being in a romantic relationship.	1	2	3	4	5 6
6. In terms of her breakup, I feel that Emily sort of had it coming.	1	2	3	4	5 6
7. Emily's boyfriend was justified in breaking up with her.	1	2	3	4	5 6
8. I feel that Emily was responsible for the breakup.	1	2	3	4	5 6
9. In terms of Emily having to live with her ex-boyfriend after their breakup, I feel that she had it coming.	1	2	3	4	5 6
10. I feel that Emily is responsible for her living situation.	1	2	3	4	5 6
11. I feel that Emily sort of deserves to have lost her social circle after her breakup.	1	2	3	4	5 6
12. I feel that Emily is responsible for losing her social circle after being broken up with.	1	2	3	4	5 6
13. I feel that Emily deserves to struggle in school.	1	2	3	4	5 6
14. In terms of Emily doing poorly at school after her breakup, I feel that she sort of had it coming.	1	2	3	4	5 6

In thinking about the events that led up to Emily's breakup:

1. To what extent do you think Emily caused the breakup?

Totally not due to Emily 1 2 3 4 5 6 7 Totally due to Emily

2. To what extent do you think Emily's boyfriend caused the breakup?

Totally not due to Emily's boyfriend 1 2 3 4 5 6 7 Totally due to Emily's boyfriend

3. To what extent do you think something about their situation (i.e., circumstances beyond their control) caused the breakup?

Totally not due to their situation 1 2 3 4 5 6 7 Totally due to their situation

4. Who/what do you think is the **most** responsible for the breakup?

- a. Emily
- b. Emily's boyfriend
- c. Something about the situation (i.e. circumstances beyond their control)

PANAS**Appendix C – Study 2 Demographic Questionnaire**

This information is helpful to ensure that we have a representative sample of participants in our study.

Age ____

Gender: Male ____ Female ____ Other ____ Please specify (optional) ____

Are you currently employed?

____ No

____ Yes, part-time

_____ Yes, full-time

_____ Retired

_____ Student

Please indicate your current household income in USD.

_____ Rather not say

_____ Under \$10,000

_____ \$10,000 - \$19,999

_____ \$20,000 - \$29,999

_____ \$30,000 - \$39,999

_____ \$40,000 - \$49,999

_____ \$50,000 - \$74,999

_____ \$75,000 - \$99,999

_____ \$100,000 - \$150,000

_____ Over \$150,000

Please indicate your ethnic origin by choosing one of the categories listed below. Ethnic origin refers to the ethnic or cultural group(s) to which your recent ancestors belonged. Ethnic origin pertains to ancestral identity or background and should not be confused with citizenship or nationality. If you have multiple ethnic origins, then please select the one you most strongly identify with. If this is not possible, then leave this question blank.

_____ Caucasian

_____ East Asian

_____ South Asian

_____ Middle Eastern

_____ African

_____ Latin, Central, and South American

_____ Caribbean

_____ Aboriginal

_____ Other -- please specify: _____

What do you think this study was about? _____

Are there any reasons to disclude your answers from analysis?

Appendix D – Study 3 Pre-Study Instructions

We ask that you complete the study on a device with working sound, as you will be required to listen to audio files in this study. Please complete the study in a quiet area where you will be able to hear the audio from this study. We recommend the use of earphones or headphones.

Appendix D – Study 3 Measures

40-Item Narcissistic Personality Inventory (NPI)

Narcissistic Admiration and Rivalry (NARQ)

Listed below are a number of statements. Please read each statement and decide to what extent you agree that the statement describes you **RIGHT NOW**.

- | 1 | 2 | 3 | 4 | 5 | 6 |
|---------------------|---|---|---|---|---------------------|
| Not Agree
at All | | | | | Agree
Completely |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | |
| 9. | | | | | |
| 10. | | | | | |
| 11. | | | | | |
| 12. | | | | | |
| 13. | | | | | |

14. Other people are worth nothing. (Rivalry, devaluation)
15. Being a very special person gives me a lot of strength. (Admiration, uniqueness)
16. I manage to be the center of attention with my outstanding contributions. (Admiration, charmingness)
17. Most people are somewhat losers. (Rivalry, devaluation)
18. Mostly, I am very adept at dealing with other people. (Admiration, charmingness)

Rosenberg Self-Esteem Scale

Target Interview Audio Manipulation

In a previous journal study, we had undergraduate participants make monthly audio recordings where they talked about the events in their lives. We also recorded interviews with the participants, where they were asked to provide their honest responses to a variety of questions designed to help others get to know them. Although the participant in the audio recording you are about to hear answered many different questions during her interview, we selected 7 questions and answers that best describe the participant for you to hear. Afterward, you will be asked to answer some questions about your impression of the participant in the audio recording.

On the next page, you will see 7 questions. Below each question is an audio recording of a participant named Jesse answering that question. Please turn on the volume of your electronic device and put on your headphones, and make sure you are in a quiet area so you can hear the audio recordings. Please read each question carefully, and then click the play button to listen to the audio recording containing Jesse's answer. Please repeat this process until you reach the bottom of the page.

Question 1: How would you describe your leadership ability?

Non-antagonistically-narcissistic target condition: "I'm a natural born leader. People always look to me to lead them."

Antagonistically-narcissistic target condition: "I'm a natural born leader. People look to me to lead them. I don't think other people even compare to me in leadership ability."

Non-narcissistic target condition: "I'd say average? I usually don't feel like I have more leadership experience than most other people."

Question 2: At school, do you generally get along with your professors and classmates?

Non-antagonistically-narcissistic target condition: "I'm great. Everyone gets along with me."

Antagonistically-narcissistic target condition: “I’m great. It isn’t whether or not I get along with them; it is whether they can get along with me.”

Non-narcissistic target condition: “I try to be pretty friendly. There’s no sense in being difficult for no reason.”

Question 3: If you were given the opportunity to teach your PS 101 course, how do you think you would do?

Non-antagonistically-narcissistic target condition: “I’d probably do extremely well because of how talented I am.”

Antagonistically-narcissistic target condition: “I’d probably do better than the other 101 teachers at this school because of how talented I am.”

Non-narcissistic target condition: “I don’t have a degree in psychology, so probably not too great.”

Question 4: If a teacher taught you a specific task, but you figured out a more efficient way of doing it, what would you do?

Non-antagonistically-narcissistic target condition: “If? This always happens. Sometimes I correct the professor.”

Antagonistically-narcissistic target condition: “If? This always happens. Sometimes I correct the professor, but I know it’s not my job to make everyone’s life easier.”

Non-narcissistic target condition: “Well, if I thought I had a better solution, I might talk to my professor after class about it to get some feedback.”

Question 5: How do you feel when you unexpectedly become the center of attention?

Non-antagonistically-narcissistic target condition: “What do you mean unexpectedly? I’m usually the center of attention, so I’d sort of expect it.”

Antagonistically-narcissistic target condition: “What do you mean unexpectedly? I’m usually the center of attention, so I’d sort of expect it. I’m more interesting than other people.”

Non-narcissistic target condition: “I don’t necessarily like it, but sometimes you just have to go with it.”

Question 6: Given your current accomplishments, would you consider yourself successful?

Non-antagonistically-narcissistic target condition: “Definitely. I have accomplished incredible things in my life already, and I’ve still got a wide road ahead of me.”

Antagonistically-narcissistic target condition: “Definitely. I have accomplished more than what most people have accomplished in a lifetime, and I’ve still got a wide road ahead of me.”

Non-narcissistic target condition: “I’m sure there are others more successful than me, but I’m happy with my accomplishments.”

Question 7: Would you say that you’re a people-person?

Non-antagonistically-narcissistic target condition: “I’d say so. I’m incredibly charming.”

Antagonistically-narcissistic target condition: “I’d say so. I’m incredibly charming. When people don’t like me, it’s usually because they’re insecure with themselves.”

Non-narcissistic target condition: “Sometimes. I mean, I can make friends, but I doubt I’d be good in sales.”

For the next part of the study, you will answer some questions about your impression of Jesse.

Similarity

Liking

Meta-perceptions of Liking

Difficulty Audio

The next part of the study contains another audio recording from Jesse’s participation in the journal study. You will listen to one of Jesse’s monthly audio recordings where she describes a difficulty she has been experiencing in her life. Afterward, you will be asked to answer some questions about the recording. Again, you will first see a question, then Jesse’s answer below in the form of an audio recording.

Please ensure that the volume of your device is turned on and put on your headphones, and make sure you are in a quiet area so you can hear the audio recording. Please read the question carefully, and then click the play button to listen to the audio recording.

Question: Spend some time describing a significant challenge you’ve experienced in some detail. Describe the most significant thing that you’ve struggled with emotionally, recently.

“Okay, I wouldn’t normally talk about this, because I don’t really like talking about my feelings, or difficulties I’m having. I usually just deal with them. But I have had a hard time because of my relationship—my ex-relationship. We- uh broke up about a week ago. And I didn’t see it coming... at all. I mean, we were fighting, but, every couple fights, right? And... I didn’t think that would be it after 2 years. It’s the longest I’ve ever been with anyone. We’ve been together

since high school. She/he was the most popular girl/guy, and I had her/him. But, yea... uh... she/he just, came into my room after we had a fight, and I thought she/he was gonna make up like usual. I went to kiss her/him, and she/he stopped me. And sat me down, and said she/he was sorry, but it wasn't working, that I had changed, and-uh- she/he didn't wanna be in a relationship with me anymore because it was too draining. I'm not used to people breaking up with me. It's really hard, because I can't get any space, from her/him. Uh, we live together, with other people. But, still. And, um, when we moved in, I took the stupid little box room because, she/he had the really big room with the whole bed, and since I was going to spend all my time sleeping in there anyway, it didn't seem to matter. But I'm stuck curled up in this tiny little box room now. She/he could have at least given me the bigger room after breaking up with me. I spent, most of my first year with her/him as well. So I never really got to know anyone in my classes very well. So there's no one I can really call and go hang out with now. I'm sure I'll make friends, but it doesn't make the break-up any easier. All my friends are her/his friends too. I'm... embarrassed to say it, but it's affecting my coursework. I can't concentrate. Every time I sit down to do an essay or a revision or whatever, I just, get distracted, wondering how she/he could have broken up with me-- I'm not used to being rejected. Was there something I could have done differently? I missed the deadline... a big one. I'm halfway through my university experience and I feel stupid letting the breakup get to me. I realize now how much I let my life get wrapped up with her/his life. Well... it's a bit awkward in the house. Everybody's just... being careful and kinda tiptoeing around me and I have to act like everything is normal. It sucks. She/he doesn't really know how I feel. I haven't told her/him. I just feel like I have to pull myself together. I thought we'd just stay together and never imagined I'd be so bothered by breaking up. Halfway through my second year, and I've signed a house with her/him. Been here with the same people, so, they say that I have to pay rent on the house even if I could find somewhere else. And if I go I still have to pay the rent, and... I hate being in the house now. I miss the compliments she/he gave me... telling me I was the best thing in his/her life, calling me beautiful/handsome... She/he really paid attention to me. She/he went out last night, and never came home. Maybe it shouldn't bother me, but I get angry at the thought of her/him hooking up with some random guy/girl. We seriously just broke up, like a week ago. I just don't know what's best to do now. Why would she/he break up with me? I feel like an idiot for letting myself get so caught up with her/him. I guess I just don't know what comes next."

For the next part of the study, you will complete a short questionnaire that assesses your response to the difficult Jesse has just described.

Empathy

The following statements inquire about your thoughts and feelings in regards to how you felt toward Emily while listening to her talk about her difficulty. For each item, indicate how well it describes you by recording your response using the scale provided. Please read each item carefully before responding and answer as honestly as you can.

(1) = Does not describe me well	(2)	(3)	(4)	(5) = Describes me very well
1. I had concerned feelings for Jesse. (Empathic concern)	1	2	3	4 5

2. I found it difficult to see things from Jesse's point of view. (Perspective taking) [-]	1	2	3	4	5
3. I didn't feel very sorry for Jesse's situation. (Empathic concern) [-]	1	2	3	4	5
4. I tried to look at Jesse's side of her breakup. (Perspective taking)	1	2	3	4	5
5. I felt kind of protective towards Jesse. (Empathic concern)	1	2	3	4	5
6. I tried to understand Jesse better by imagining how things look from her perspective. (Perspective taking)	1	2	3	4	5
7. Jesse's misfortune did not disturb me a great deal. (Empathic concern) [-]	1	2	3	4	5
8. When I thought of Jesse being treated unfairly, I didn't feel very much pity for her. (Empathic concern) [-]	1	2	3	4	5
9. I was quite touched listening to Jesse describe her breakup. (Empathic concern)	1	2	3	4	5
10. I felt soft-hearted toward Jesse. (Empathic concern)	1	2	3	4	5
11. To understand better how Jesse is feeling, I was able to put myself in Jesse's shoes. (Perspective taking)	1	2	3	4	5

Deservingness & Attribution

Target Narcissism Manipulation Check

Please answer the following question with Jesse's interview in mind. Listed below are a number of trait pairs. For each pair of traits, please use the scale to indicate whether you think one trait describes Jesse more than the other.

1 Not at all Self-absorbed	2	3	4	5	6	7	8	9	10 Extremely Self-absorbed
1 Not at all Individualistic	2	3	4	5	6	7	8	9	10 Extremely Individualistic
1 Not at all Self-confident	2	3	4	5	6	7	8	9	10 Extremely Self-confident
1 Not at all Arrogant	2	3	4	5	6	7	8	9	10 Extremely Arrogant
1 Not at all Exploitative	2	3	4	5	6	7	8	9	10 Extremely Exploitative

1 Not at all Strategic	2	3	4	5	6	7	8	9	10 Extremely Strategic
1 Not at all Aggressive	2	3	4	5	6	7	8	9	10 Extremely Aggressive
1 Not at all Upfront	2	3	4	5	6	7	8	9	10 Extremely Upfront
1 Not at all Rude	2	3	4	5	6	7	8	9	10 Extremely Rude
1 Not at all Dominant	2	3	4	5	6	7	8	9	10 Extremely Dominant
1 Not at all Pompous	2	3	4	5	6	7	8	9	10 Extremely Pompous
1 Not at all Hostile	2	3	4	5	6	7	8	9	10 Extremely Hostile
1 Not at all Assertive	2	3	4	5	6	7	8	9	10 Extremely Assertive
1 Not at all Devaluing of Others	2	3	4	5	6	7	8	9	10 Extremely Devaluing of Others

PANAS

Appendix D – Study 3 Demographic Questionnaire

This information is helpful to ensure that we have a representative sample of participants in our study.

Age ____

Gender: Male ____ Female ____ Other ____ Please specify (optional) ____

Are you currently employed?

____ No

____ Yes, part-time

____ Yes, full-time

____ Retired

____ Student

Please indicate your current household income in USD.

____ Rather not say

____ Under \$10,000

____ \$10,000 - \$19,999

____ \$20,000 - \$29,999

____ \$30,000 - \$39,999

____ \$40,000 - \$49,999

____ \$50,000 - \$74,999

____ \$75,000 - \$99,999

____ \$100,000 - \$150,000

____ Over \$150,000

Please indicate your ethnic origin by choosing one of the categories listed below. Ethnic origin refers to the ethnic or cultural group(s) to which your recent ancestors belonged. Ethnic origin pertains to ancestral identity or background and should not be confused with citizenship or nationality. If you have multiple ethnic origins, then please select the one you most strongly identify with. If this is not possible, then leave this question blank.

- ☐ Caucasian
- ☐ East Asian
- ☐ South Asian
- ☐ Middle Eastern
- ☐ African
- ☐ Latin, Central, and South American
- ☐ Caribbean
- ☐ Aboriginal
- ☐ Other -- please specify: _____

What do you think this study was about? _____

Are there any reasons to disclude your answers from analysis?

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